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Original Communications.

TONSILLOTOMY AND ITS COMPLICATION BY HÆMORRHAGE.*

BY N. A. POWELL, M.D., EDGAR, ONT.

A three-fold purpose has induced me to present, at this meeting, certain points regarding tonsillotomy and one of its occasional complications. To give you in brief a history of the case which first directed my attention to this subject, to bring out in discussion some of the experience at present stowed away in the gray matter of the cerebral convolutions of the members of this association, and with such help to reach sound conclusions as to what the treatment of the complications in question should be, have been the objects which I have had in view in the preparation of this paper.

At the last meeting of the American Laryngological Association, its secretary, Dr. George M. Lefferts, of New York, discussed "The Question of Hæmorrhage after Tonsillotomy," and classified its frequency and severity thus:—

- 1st. A fatal hæmorrhage is very rare.
- 2nd. A dangerous hæmorrhage may occur.
- 3rd. A serious one, serious as regards both possible, immediate, and remote results is not very unusual, and
- 4th. A moderate one requiring direct pressure, and strong astringents to check it is commonly met with.

Of the first or fatal class, the writer had not been unfortunate enough to meet with an example. Other surgeons have, however, placed on record a small number of cases fatal from hæmorrhage following the excision of the pharyngeal tonsils, while a much larger number of deaths have been caused by the loss of blood succeeding operative procedures, other than amputations, in the tonsillar region.

Coming within the *second* class, two cases have occurred in the practice of Dr. Lefferts from a total of about 500 operations. Both are recorded in his paper. The history of the first I shall read to you since I am able from the standpoint of the patient to add to it somewhat. In the fall of 1874, while at Demilt Dispensary attending the throat-clinic, held on alternate days by Drs. Lefferts and McBurney, I requested the former to remove my tonsils, as they were subject to recurrent attacks of follicular inflammation. I give you in his language what then occurred.

"I amputated both excessively hypertrophied tonsils with the tonsil bistoury. My incisions, I may say here, were made with care, and were such as I had made many times before in other instances. A few moments after the operation, an inspection of the throat having shown no excessive bleeding, I left the dispensary, where the operation had been performed, and my patient, who was using an ice-water gargle. I did not see him again for several hours, and then found him almost exsanguinated and pulseless. Profuse bleeding commenced almost immediately upon my departure, occurring very suddenly. The flow was so rapid that the patient could not clear his mouth of it. Blood passed into the stomach, giving rise to repeated attacks of vomiting, and into the larynx, causing strangulation. As described to me, his condition was for a time a dangerous one. All the resources at hand at the moment that suggested themselves to the doctors present, except pressure, were tried without avail. The hæmorrhage persisted. I was sent for, but not found, and finally my colleague, Dr. McBurney, fortunately reached the case some three hours after the commencement of the bleeding. He at once did what should have been done before, cleared all blood clot out of the pharynx, differentiated the source of the hæmorrhage and applied direct pressure over the spot on the right side from whence it was found to come. In a short time it had ceased. I arrived later, and found my patient stretched upon a bench, as I have said, white, bloodless, and almost pulseless. After an anxious night spent with him where he lay, he was carried in the morning to his home, and slowly convalesced during the following month. There was at no time a recurrence of the bleeding."

In the removal of the right tonsil, the one that gave rise to the trouble afterwards, Dr. Lefferts was

assisted by a surgeon who happened to be present. This latter gentleman held the vulsellum forceps in order to free Dr. L.'s right hand for the use of the bistoury. I noticed that as the section was made strong traction was also made upon the tonsil, and this must have placed on the stretch the tissue last divided, which was the lower part of the gland. In this part lay the artery—probably the tonsillar branch of the ascending pharyngeal—from which the subsequent bleeding occurred. Its mouth opened deep in the sulcus, between the tongue and the stump of the tonsil, and it was so obliquely divided that the contraction and retraction by which natural hæmostasis is effected could not take place. Possibly this vessel was enlarged at the expense of the others supplying the gland; possibly also the indurated tissue through which it ran prevented its closure. About half-an-hour after Dr. Leffert's hurried departure to fill his next engagement, the bleeding became very free. I then asked some of the physicians from other departments of the dispensary to look at the wound. They did so and one prepared for me a tannic acid gargle as advised by Mackenzie, while another immediately after its use applied to the part a solution of the persulphate of iron with a brush. Between them they filled the fauces and pharynx with ink manufactured on the spot; a third gentleman then began giving me ten grain doses of quinine, while another spoke rather indefinitely of the hypodermic use of ergotine or the ligation of the carotid. The fifth could only offer his regrets that he had to leave at once, as he "wanted to wait and see Lefferts stop this." These gentlemen were all educated and skilled physicians in their own specialties, and all but the last seemed anxious to be of service, but none of them remembered the simple surgical fact that direct pressure on the mouth of any bleeding vessel will control the loss till other and more permanent means of checking it may be adopted. The flow being rapid I became faint and exsanguinated in a short time, and in the opinion of those better able than myself just then to form a correct opinion, I could not have survived another hour without the help which Dr. McBurney afforded. It was estimated by several gentlemen present that the loss of blood amounted to between six and seven pints. If either my friends, the throat specialists, or a good practical surgeon had been present when it began,

it would not probably have reached as many ounces, nor would the general condition have become a dangerous one. Since that time I have frequently had occasion to perform tonsillotomy, and have met with nothing more unsatisfactory afterwards than the loss of an occasional fee for so doing. I have knowledge, however, of nine cases besides my own in which a fatal result was all but reached. One of these occurred in the practice of an old fellow-student of mine who now fills a chair in a western college. In this case the doctor left a student to watch his patient, and was recalled in haste two hours later. He found it necessary to apply pressure with a sponge on a holder for many hours, and has stated that without the recollection of my experience and treatment to guide him he would have been at a loss to know what to do.

From the statistics which I have at hand, based chiefly on the practices of leading surgeons, I am disposed to think that a dangerous degree of hæmorrhage occurs in about 1 per cent. of all tonsillotomies. If with proper after treatment it is thus frequent, may we not consider its risks to be greater in connection with that slap-dash and happy-go-lucky surgery with which even in Ontario we are not altogether unacquainted? We know how often some physicians meet with post-partum hæmorrhage, and are apt to connect this frequency with a faulty or careless treatment of the third stage of labor. That obstetrician will see least of it, probably, who has its dangers and its prevention most constantly in his mind. The same reasoning will apply to this form of hæmorrhage. With the conviction that the liability to hæmorrhage from the stump of an amputated tonsil will be lessened by the right performance of the operation that may cause it, I submit without arguments the following conclusions for your adoption or amendment:—

The surgeon who proposes to remove a tonsil should have at hand a strong and perfectly manageable light such as is obtained from a student's lamp and a forehead protector of four inch diameter and short focus. He should not be dependent upon the kitchen cupboard for a part of his armament, but should have a good tongue depressor, and this is almost the same as saying that he should have Turke's model, as for any operation on the back of the throat it is the only good one.

He should use the tonsillotome preferably for children, and especially if ether be not given. If

the part to be removed be prominent he should use this instrument for adults also, and should prefer McKenzie's or Hamilton's models, which cut by propulsion to any of the forms in which a sickle-shaped knife makes the section as it is being retracted.

He should use the vulsellum forceps or double-hook and probe-pointed bistoury for all cases in which the gland is sessile, or in which a particular portion of it is to be excised. In operating he should stand before the patient, seize the left tonsil and cut from above downwards, so as to remove all that projects beyond the anterior pillar of the fauces. Then, standing behind the patient, he should remove to the same degree the right gland by cutting from below upwards.

Bearing in mind the manifold risks of operating on even small inflamed parts he should select a period of quiescence for the amputation, the exceptions to this rule being: first, that class of cases in which the gland is very small and flat between the catarrhal attacks upon its secreting surface; and second, the rare condition of actual danger to life from combined hypertrophy and inflammation.

The surgeon after a tonsillotomy should not lose sight of his patient for several hours, but should make frequent and careful inspection of the throat. He should remember that, especially in children, blood may pass into the stomach and give no external sign till blanching of the face or faintness shows its loss. Should this examination reveal actual hæmorrhage in unsafe amount he should resort at once to direct pressure, either with the fingers or a sponge on a firm holder. After this has been some time applied he should examine for bleeding points, and if found they should be caught and twisted. Cold, in the form of ice-water or ice in substance may be made use of, but it is better to avoid the application of the styptic preparations of iron or other astringents. In the rare event of pressure, torsion, and cold being, when properly applied, insufficient, the ligating of the external carotid artery, and this also failing, of the common trunk may be taken into consideration.

A CASE OF ECLAMPSIA.*

BY THOS. T. S. HARRISON, M.D., SELKIRK, ONT.

I bring this case before the Association, not to show my skill in treating it, or to boast of the

favorable result of the treatment, but because the case made a profound impression on me, and because I have often asked myself if I could have done better had I taken a different course. We have a right to pride ourselves on our successes, but my experience is that we are taught more by our failures.

On the 8th of last month, I was called at midnight to see a patient some eight or nine miles distant—was told it was a case of confinement and that the woman was very bad. I took with me my instruments, chloroform, ergot, and my ordinary pocket-case. I got there between one and two a.m., and found that the patient—a primipara—had been delivered before I was sent for, having had a very easy and short labor, the nurse—a neighbour's wife—who attended her, telling me that she had not had more than a couple of real labor pains, and that she was over it before they could get a messenger ready to send for me. After her delivery she said she was pretty comfortable, but had a slight headache and pain in the stomach. Without the slightest warning she went into convulsions. When I saw her she had just recovered from a convulsion, the seventh or eighth. There was no cedema, nor was there any history of swelling or puffiness; the placenta was retained. I made an examination, and found that the placenta was still in the uterus. Thinking it likely to be adherent, to save the shock to the nervous system that might ensue if I had to pass the hand into the uterus, I administered chloroform. I removed the placenta by just hooking my finger behind it without the slightest trouble. It lay loose in the uterus. I ceased giving chloroform, and she lay easy for some fifteen minutes, when, with a groan, she went into another convulsion. As soon as possible I gave her about half a grain of morphia by the stomach and resumed the chloroform, keeping her under its influence about an hour. The pupils were contracted, the lids closed, but on raising the lids, under the influence of light the pupils rapidly dilated, and oscillated between dilatation and contraction, but on the approach of a convulsion they became widely dilated. I gradually withdrew the chloroform, but long before she came from under its influence she had a severe fit, and another quickly followed. I now sent for my hypodermic syringe, bromide of potassium and chloral. In the mean time I bled her to about

*Read before the Ontario Medical Association, June 8th, 1882.

thirty ounces. She was quiet and breathed easily for some three-quarters of an hour after bleeding, without chloroform—before bleeding the breathing had been growing slightly stertorous—when she again went into convulsions. I now kept her under chloroform until the return of my messenger, when I injected about one-third of a grain of morphia hypodermically, and by the rectum a drachm of bromide of potassium with half a drachm of chloral hydrate, gave chloroform upwards of an hour and a half, when, upon gradually withdrawing it, the convulsions returned in an aggravated form.

I now kept her under its influence until about eight o'clock a.m., when the breathing became stertorous, the pupils dilated, and her state so alarming that I withheld the chloroform without having a return of the convulsions; but she lay comatose until the next midnight, when she died. About the middle of the afternoon she seemed dying, but on hypodermic injection of ether and brandy, she recovered, only to sink again.

Now, the question with me is, Did I treat this case judiciously? Would the result have been better if I had had bromide or chloral at first? Was it good treatment to give morphia with contracted pupil, even if it did dilate under the influence of light? Ought I to have delayed venesection as long as I did? In olden times I used to bleed largely and at once, but of late—in fact for many years, have treated cases successfully without bleeding at all. I attended a case last winter in which the attack came on a couple of hours after delivery, and under the use of morphia, bromide, and chloral it did well. It is a long time since I have seen a death from eclampsia, and the death of this young woman deeply affected me.

LOCOMOTOR ATAXIA—RIGHT SCIATIC NERVE STRETCHED FOR RELIEF OF "LIGHTNING PAINS."

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

M. Shea, aged 43, when first seen in September of 1881, complained of shooting pains in his legs, thighs, and lower part of the abdomen. He also complained of inability to walk in the dark, and giddiness. The pains made their first appearance twelve years ago while he was engaged in working

in the lumber woods of Wisconsin. His occupation was that of a driver, and he was compelled to sit for hours on the cold logs, and it is to cold, contracted in this way, that he attributes his present trouble. For several years the pains only recurred at long intervals; but lately he is seldom—rarely more than 24 hours—free from them. They have also greatly increased in severity during the last two years, and especially during the last few months. He first noticed that he was apt to stumble in the dark, five years ago. The ataxia has steadily increased during this period. For several months it has been so pronounced that he has been unable to perform his usual work. With the exception of gonorrhœa, he never had any illness. He is certain that he never had syphilis. Family history is good. He says he never ate or drank to excess.

Condition on the 1st of October, 1881, two weeks prior to the stretching of the right sciatic nerve.

The lightning-like pains with which he is afflicted recur very frequently; the longest interval of freedom from them during the last year has been only five days. They generally affect the lower extremities. It is but seldom he complains of pain elsewhere, and then only in the left arm. The pains are of extreme severity, but only of momentary duration. They generally last 24 hours, and during that time are nearly always confined to a small spot. A favorite situation for them is the dorsum of the right foot. When they last for 24 hours it is always noticed that the limb which has been their seat has atrophied. Repeated measurements have shown a diminution of half an inch in the circumference of the limb. He is very slow to appreciate painful sensations when applied to the two lower and left upper extremities. In the feet there is an interval of about six seconds before he is able to feel a severe pinch or the prod of a needle. In the legs this interval is five, and in the thigh eight seconds. He feels the simple rubbing of the hairs on his legs much more readily than a severe pinch of the skin. He is able to distinguish, although slowly, the difference between a hot and a cold application, when applied to his lower extremities. With his eyes shut he is unable to touch the point of his nose with either hand, nor is he able to point out the position of his feet. His sight is good, although there is commencing atrophy of both discs. The pupils react slowly to

light, but readily when the eyes are accommodating. There is no myosis or paralysis of any ocular muscle. He is able to distinguish colors. His hearing, taste, and smell are all normal. He complains greatly of numbness of both lower extremities, and of a very disagreeable sensation, as if the skin were too tight for his legs. When walking he has to keep his eyes on his feet or he would fall, and he feels as if he were treading on some soft substance. There is a loss of sensation in the thumb, index, and middle fingers of the left hand. He is able to retain his urine without it causing him the least inconvenience for over twenty-four hours. To empty his bladder he has to strain very much. He is troubled with obstinate constipation. He says he often feels as if a weight of one hundred pounds was compressing his waist. When standing or walking he complains of what he calls a cramp-like condition of the muscles of the lower part of the abdomen. The patellar tendon reflex is absent on each side. There is no ankle clonus or plantar reflex. The cremasteric and epigastric reflexes are absent. When walking, his knees often give way suddenly under him. He says that for this reason he avoids as much as possible walking on the streets. He has the characteristic gait of an ataxic. He is unable to walk or stand with his eyes shut. Intelligence and memory are not affected. Lately he has been at times melancholy, at other times he is in the best of spirits.

On October 14th the right sciatic nerve was stretched. The right was chosen on account of the pain being generally more severe in that limb. The night following the operation the pains set in on the outer side of the right knee and were more severe than they ever had been. The following day they left, and did not reappear for three weeks. This was the longest interval of freedom from the pains since they first commenced, twelve years previously. It is now about eight months since the operation was performed, a period sufficiently long to judge what, if any, influence the stretching has exercised on the disease or its symptoms. The results may be summed up as follows:—

(1.) *On the pain.* The result on the whole has been very satisfactory. Previously he suffered nearly one-fourth of the whole time from the pains which were of an agonizing character. Now he seldom has attacks oftener than once every three weeks, and he has been as long as six weeks free.

Before this operation the pains set in suddenly, with great severity, and left just as suddenly. Since its performance they come on by degrees, increase up to a certain pitch, then decline slowly. During the wave of ascent the intervals become shorter and shorter, and during the wave of descent they become longer and longer, until finally they cease altogether.

(2.) *On the patellar reflex.* Previous to the stretching there was absolutely no response, but since, there has been an appreciable jerk when the tendon is struck. It is, however, very late in making its appearance, there is often an interval of two seconds between the tap and the response. According to Eulenburg* the interval should be only $\frac{1}{3}$ of a second. This he found to be the interval in the examination of eighty healthy male adults.

(3.) *On the delayed sensation.* Prior to the operation it took him from five to eight seconds to feel the stab of a needle in either lower extremity. He can readily appreciate now, and has, since the stretching, a similar irritation in from one to two seconds.

(4.) *On the muscular sense.* Up to the time of operating it was with the greatest difficulty, and then only after repeated trials that he could touch his nose, or point to the position of his toes when his eyes were shut. He can readily perform these acts now.

(5.) *On the ataxia, etc.* The operation did not exercise the least beneficial effect over the ataxic symptoms. Neither was there any favorable change made over either the bladder or rectum symptoms. The ataxia has been steadily progressive. The sense of weight around the lower part of the abdomen is as great as ever.

A very interesting symptom occurred six days after the stretching, viz.: a very extensive hæmorrhage from the wound and into the subcutaneous tissue of the limb operated on. The bleeding was copious enough to saturate all the antiseptic dressings, and even find its way through the bed. This was likely the result of the pains which set in a few hours after the operation, and lasted with great severity for nearly 24 hours. This is a more probable explanation than that the result was from any injury sustained by the vessels from the stretching.

* Ueber die Latenzdauer und den pseudoreflexorischen charakter der schnenphenomene. Nemg. Centl. No. 1.

Straus* reports several cases of extensive subcutaneous hæmorrhages following the pains of ataxia. These ecchymoses are probably induced by direct irritation of the vaso-dilator fibres. It has been shown, both by Brown-Séquard, and Stricker, that the posterior roots contain vaso-dilating fibres. If this view be correct, then the ecchymoses and the lightning pains are caused by the same morbid process.

QUARTERLY REPORT ON THE PROGRESS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., L.R.C.P. AND S., EDIN., BRUCE-FIELD, ONT.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

The treatment of phthisis by the constant inhalation of antiseptic substances, has received a great impetus since the discovery of the *tubercle bacillus*, by Koch and Baumgarten.

Undoubtedly in the future this mode of treatment of phthisis will not be so neglected as it has been in the past. We ought soon to be in a position to estimate what benefit is likely to be derived from it. That it will be of marked utility, at least in warding off some of the complications (septicæmia) is clear, but to treat a case of phthisis without any other form of medication would be very irrational. Of the many antiseptic substances used up to the present, the following may be mentioned:—Carbolic acid, creasote, spirits of turpentine, thymol, terebene, camphor, eucalyptol, tincture of iodine, etc. Dr. Yeo, of King's College Hospital, uses a combination of carbolic acid or creasote with equal parts of the spirits of chloroform. The latter is said to diffuse these substances, and is itself somewhat of an antiseptic, and has a soothing effect on the often irritable bronchial mucous membrane. If cough is present it has a wonderful influence in allaying it. Twenty drops of a mixture of equal parts of creasote and spirits of chloroform dropped on the tow of the inhaler, and repeated when exhausted, is enough to bring about these results in a short time.

Benzoate of soda has been much used in Germany during the last two years, in the form of

spray, but as it requires the constant attention of the patient it is not so convenient as the above method, and further, it is doubtful whether it possesses antiseptic properties as pronounced, as carbolic acid, creasote, etc.

The following case is well worth quoting as a good example of the influence exercised over pulmonary tuberculosis:—The case was under the care of Dr. Burney Yeo. The patient was a married lady, aged 28, who had lost two brothers from consumption. For the past two years she was losing flesh, and had been troubled with a cough. She was confined last Christmas, and since that she was much worse. Her cough was bad and attended by a profuse expectoration. She was also troubled with night sweats. Voice almost lost; appetite poor; pulse 112; respiration 20; temperature 101. Great emaciation. There was pronounced physical evidence of consolidation of the left apex and a part of the right lung posteriorly corresponding to the spine of the scapula.

She was ordered to wear as constantly as possible a respirator, charged with from five to twenty drops at a time of a mixture of equal parts of creasote and chloroform. She was to take iron, quinine and the hypophosphite of lime internally. After three weeks of the above treatment the improvement was very marked. The temperature had become normal and the night sweats had entirely disappeared; her voice had returned, and the cough and expectoration were greatly lessened. The dulness over the left apex was much less evident; her general condition was greatly altered. Dr. Yeo, in speaking of this case, said: "I have never seen a more striking improvement in so short a time, under any plan of treatment, or in any locality. But this patient had been unusually obedient to the instructions that had been given to her. She had devoted herself at once, and unhesitatingly to all the details of the treatment. She had removed immediately to an aseptic if not antiseptic atmosphere; she had passed a great part of her time in a hammock suspended between fir trees, and she had perseveringly worn her inhaler as I had directed."

For many years Prof. Jaccoud, of Paris, has been in the habit of treating certain cases of phthisis by the internal administration of creasote. "This remedy," he says, "more rapidly and more surely than any other, diminishes the expectora-

* *Archives de Neurologie*, No. 4, 1881.

tion and limits the extent of the catarrhal lesions, and thus reduces considerably the area of the pulmonary changes. But that is not all; I am induced to believe that creasote may act on the fundamental lesions, and promote indurative changes, which, as you know, is the method of cure."

He gives it in doses of three minims to commence with, and increases it by a minim every ten days until five, and not more than six minims. It can be given in the cod-liver oil, or if the patient is not taking this, in glycerine. The following is the formula:—Glycerine, 10 drachms; brandy, 2 drachms; creasote, 3 to 6 minims; a third of this to be taken three times a day.

The internal use of carbolic acid has been recommended also, but it is not likely to come into favor when we are in the possession of as trustworthy but much less dangerous antiseptics. Of all antiseptics benzoate of magnesia can be given in the largest doses internally. As much as an ounce can be given in the twenty-four hours without causing any inconvenience.

Fränkel, on the strength of results obtained by the direct injection of antiseptics into the lung tissues of rabbits, recommends a similar procedure in phthisis, putrid bronchitis, and gangrene of the lungs. He has only put this idea into practice once in the human subject. In a patient with *fœtid* expectoration he made six injections, each one containing fifty minims of a five per cent. solution of carbolic acid. There was no fever or reaction following the injection. No beneficial action on the expectoration followed. He considers that these injections set up inflammatory action in the lungs, and that as a result of this there is left cicatricial bands which limit the tuberculous process when the part injected is healthy and in the neighbourhood of the diseased portion. When the injections are made directly into a diseased part of the lung the agent acts, he considers, by changing the character of the inflammation.

THE TREATMENT OF EPILEPSY BY LIGATURE OF THE VERTEBRAL ARTERIES.

Dr. Alexander, of Liverpool, in the current number of *Brain*, gives an account of the treatment of twenty-one inveterate cases of epilepsy, by ligature of the vertebrales. Three of the cases have been free from fits for a year. In nine others

the freedom from fits has been so long that a cure may be said to have resulted, and eight have "improved in so many respects, or are improving so steadily, that the operation would be justifiable were no better results ever obtained."

Dr. Alexander considers that the treatment will become general for that class of cases of epilepsy that are uninfluenced by drugs or removal of all possible peripheral causes.

He finds the artery by making an incision of three inches in length along the external border of the sterno-mastoid, commencing about an inch above the clavicle, and at the lower end and outer side of the external jugular vein. The layers of fascia are cut through until the fatty tissue over the anterior scalenus is reached. The sulcus between this muscle and the longus colli being reached, the sixth cervical vertebra is easily made out. The artery will then be easily found, provided no veins are met with. There is little or no hæmorrhage if the operation is performed carefully.

To afford a reasonable hope of success, the operation should not be put off too long, but should be performed when it is evident that no hope of cure arises from the judicious use of medicinal agents. Even in cases of chronic epilepsy, Dr. Alexander has found the operation beneficial, and he is inclined to think that many of even the most inveterate of these cases can be cured.

He considers that the operation acts by diminishing in a marked degree the hyper-sensitiveness of the medulla, and before the collateral circulation is re-established the sensibility of the epileptic centres are so benumbed that they do not respond as formerly. The dangers of the operation are insignificant. There was only one death in over thirty operations. The cause of death in this case being septic pleurisy, due to the tearing off of the antiseptic bandages by the patient, who was an idiotic girl.

THE INFLUENCE OF ACUTE NEPHRITIS UPON THE HEART AND BLOODVESSELS.

Dr. Riegel, of Giessen, in an excellent paper, brings forward a large amount of evidence which shows that in many cases of acute nephritis, changes take place in the heart and bloodvessels even during the first few days. The first evidence of this change is seen in the state of the pulse.

From an artery beating quickly and with low tension, we have as the result of vessel changes, one beating slowly and with high tension. It is not long before we have hypertrophy of the heart when once there is marked and constant high tension in the smaller arteries. Whether this change is to be a permanent one or not depends altogether on the duration and severity of the nephritis. The more severe and extensive the nephritic changes the earlier appears the vessel and heart changes. Until quite recently the danger of circulatory disturbances following the acute forms of Bright's disease, was not even thought of. The attention of the profession was exclusively directed to the relation between chronic Bright's, and changes in the circulatory system. The late, much lamented, Friedländer was about the first to demonstrate that in acute nephritis we have changes in the heart corresponding to those which attend the chronic forms of nephritis. In the anatomical examination of a large number of cases of scarlatinal nephritis in children, which had lasted a longer time than usual, an almost never-failing condition of hypertrophy of the heart was found, often combined with dilatation, in some cases uniformly developed on both sides, in others more strongly on the left. The increase of the heart's volume was in nearly all cases very considerable, the ventricle and auricle being widely dilated; the muscular substance with the exception of the increase of volume, was mostly unchanged; only in a few cases was there found a partial degeneration of the muscular fibres. Clinical observations have not corroborated marked changes in the circulatory apparatus as the result of acute nephritis, at least nothing has been mentioned respecting such conditions. In Traube's work, edited by Fränkel, there is only the general statement, that an abnormal tension of the aortic system can be observed in the fourth week of a nephritis. This will appear most important perhaps, when we consider that Traube, in another place, says that in the more severe cases of diffused nephritis, in previously healthy young patients, in the first week of the disease, a number of palpatory and auscultatory signs can be recognized, which establish beyond doubt, the existence of a considerable sympathy between these two systems.

Henoch was not able to satisfy himself that circulatory changes followed scarlatinal nephritis.

Riegel, speaking of the way to recognize these changes, says, that the abnormal tension of the pulse is so clear and characteristic a symptom, that one with a little practice in the estimation of the tension of the vessels, without being aided by the results of examination of the urine, will have his attention drawn to the existence of a kidney disease. "I, myself, am repeatedly, on the first examination of a patient, first directed to the existence of a nephritis by this remarkable increase of tension. Also in diseases attended with fever, the sudden occurrence of high tension of the pulse, although by no means the most important symptom, will arouse a well-grounded suspicion of the complication of acute nephritis. I remember several such cases, more especially one of recurrent fever, in which the suspicion was first aroused by this high tension, together with continued high temperature, that the case was not one of febrile albuminuria, but a complicated acute nephritis. Further investigation and observation confirmed this suspicion. Fever, indeed, as is well known, always lowers the blood pressure in the aortic system. If, under such circumstances, there enters suddenly in the course of a febrile disease, an abnormally high tension, in the place of a hitherto lowered tension, we have an indication of a special complication. In the trifling number of as yet well-recognized causes of high tension in the aortic system, there is usually no difficulty in determining to which cause in particular this change is owing. Without doubt, acute nephritis is one of the most important and most frequent of these causes."

Riegel reports the case of a previously healthy boy, aged 15, who was admitted under his care on the 25th of January of the present year, with scarlet fever. The eruption had already begun to abate, and in some parts slight desquamation was to be seen. The urine was albuminous; there was no other complication. The patient improved rapidly. On the 6th of February vomiting occurred. Before this there was every indication of complete recovery. There was also noticed a slight angina tonsillar. On the 7th of February the urine was as albuminous as ever. The angina speedily disappeared, whilst vomiting occurred repeatedly during the next few following days. On the 10th there was noticed a hitherto unrecognized hardness and tension of the pulse, with slowing of the same. The sphygmograph showed a very

marked increased tension, the secondary being even higher than the primary one. Urine could not be obtained for examination, the patient stating on being questioned, that he had passed none from the previous evening.

On the 12th there was observable, along with the continuance of the abnormal tension, an increase in the area of the heart's dulness, and in the strength of the apex beat. These signs increased during the remainder of the course of the disease. On the 18th there were convulsions; the pulse became quick. Patient died on the 19th in a general convulsion. On *post mortem* there was found a hæmorrhagic and glomerulo-nephritis with well-marked dilatation and hypertrophy of the left ventricle. There was already commencing fatty degeneration of the fibres of the ventricle. There was also complete suppression of urine for ten days. In this case all the above extensive heart changes had occurred within a period of ten days as the result of the acute nephritis. Riegel gives an account of six additional cases where the circulatory disturbance was pronounced, although not so great as in the above case. They were all instances of vessel and heart changes, as the result of an acute nephritis.

Correspondence.

UNITY OF ACTION AMONG PHYSICIANS.

To the Editor of THE CANADA LANCET.

SIR,—You are probably aware that at the last meeting of the Ontario Medical Association a resolution was drafted and generally approved of, asking for a committee to report at the next meeting of the Association some plan by which the individual influence of medical men could be united and exercised for the benefit of the profession and the country. Several reasons prevented the resolution coming up.

We hear a good deal about the influence our profession might exercise if united—an influence, doubtless, which would be absolutely irresistible; and probably there never was a time when there were greater reasons for united action amongst us than the present. Almost every physician will admit that we ought not to have any thing to do with politics commonly so-called, and that the words Reformer and Conservative should not enter,

practically, into our vocabulary. We should, I am sure all will acknowledge, support the right sort of men, without reference to party. The sexanary of legal gentlemen now forming the government of Ontario may be all well enough in their way, politically speaking, but when they come to deal with matters affecting the interests of the profession or the health of the public, what a spectacle they present! That hideous monstrosity known as the "Coroners' Act," and the recent Act relating to public health, may be cited as examples. With reference to the latter, many of the leading physicians in the Province, after a number of meetings, in view of the large amount of preventable sickness, decided to ask the Government for \$5,000 with which to pay the expenses of a Board of Health for the Province, deeming this a small sum for the purpose—as small as an efficient board could be worked with. Though the Government readily acknowledged the value and usefulness of preventive medicine, and, be it observed, though they give hundreds of thousands of dollars to less worthy objects, after two or three years of shilly-shallying, they throw down the bone of \$2,000, with which the medical profession is to "run" a Board of Health for Ontario. A loaf is asked; not half a loaf is given. Many supposed, as did the writer, until the last meeting of the Association, that \$5,000, as asked, had been appropriated.

I am loath to take up too much of your valuable space; but this is a very important question to which attention is being drawn. I have a proposition to make, in which, however, I shall be as brief as possible. It is now more than a quarter of a century since a medical man occupied the position of a member of the Government of this Province—the Hon. Dr. Rolph. No class of persons know better the wants and needs of the country than do the doctors, chiefly from their constant intercourse with the masses of the people; and in the interests of the country and of the profession, which are identical, I propose that means be taken by which some competent physician shall be made a member of the next Government. I am not prepared to say at present how this may be best promoted, but, as before stated, it is a very important matter, concerning as it does directly the Governmental affairs of this Province, and is unquestionably worth the while of the profession to give some time and attention to it.

I should like to suggest also, in this connection, that we advocate changes, and important ones too, looking towards the simplification of the public educational system, which will soon, if not simplified and improved, do irreparable mischief, and send pupils, teachers and parents to the insane asylums. Finally, in view of the agricultural and manufacturing interests of Ontario, would it not be well if there were a practical farmer and a practical manufacturer as members of the Government, and not more than three lawyers at most. There are many who would be glad to learn the opinion of members of the profession on these questions.

Yours, etc.,

M.D.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The last regular quarterly meeting of the Huron Medical Association was held in Clinton, on Tuesday, July 18th, Dr. Holmes, of Brussels, President, in the chair. The following members were present :—Drs. Holmes, Worthington, McLean, Taylor, Hyndman, Young, Sloan, Graham, Williams, Bethune, and Stewart.

Dr. Young, of Londesboro', showed a very well marked case of annular malignant stricture of the rectum, in a man, aged 51 years. The first symptoms of stricture showed themselves about a year ago.

Dr. Taylor presented a man, aged 55, who has mitral stenosis and commencing degeneration of the heart. The organic heart changes in this case, appear to have followed a pneumonia which affected the patient about nine months ago, at least there was no physical evidence of any valvular or mural changes during the progress of his pneumonia.

Dr. Stewart exhibited a man, aged 35, who has well marked atrophy of the left scapular muscles. The case is one of *progressive muscular atrophy* commencing in the shoulder muscles. The supra- and infra-spinati are almost completely gone. The disease is of two year's standing. Lately he has had considerable pain about the right shoulder, but up to the present there is no wasting of the muscles in its neighbourhood. The atrophied muscles, and in fact nearly all the voluntary muscles of both upper and lower extremities are the seat of fibrillary twitchings when percussed. The

treatment pursued in this case is the use of the faradic current direct to the atrophied muscles. It has not as yet been used sufficiently long to say whether it is going to do any good or not.

Dr. Graham, of Brussels, related the particulars of a remarkable case which he recently saw. The patient is a girl, aged 12. During her waking hours she only breathes six or seven times in the minute. With each inspiration the epigastrium sinks in, and the shoulders are drawn forwards and upwards very forcibly. She has been breathing in this manner for six months. Some time previously she is said to have had inflammation of the lungs. She is otherwise perfectly healthy. She is said to breathe naturally during sleep.

TORONTO MEDICAL SOCIETY.

Ordinary meeting, June 15th, 1882, Dr. A. H. Wright, Vice-President, in the chair.

Dr. Bray, President of the Medical Council, and Drs. Rosebrugh, McCargow and Day, members of the Council being present, were cordially welcomed by the Vice-President.

Dr. Zimmerman showed a young girl affected with psoriasis guttata and nummularis. The disease began eight weeks ago.

Dr. Oldright reported the following case :—A lad, aged 18, overgrown, had pains of a rheumatic nature for some days, when pneumonia developed, followed in a few days by pleurisy. Shortly afterwards a peculiar hissing endocardial murmur became evident. Feet became oedematous, pulse irregular, and temperature varied from 100°—103°. Urine gave reaction indicating coloring matter of bile. As these symptoms improved he became dull, morose, not answering when spoken to; refused food and had to be fed with a stomach pump.

Dr. Cameron reported a case of popliteal aneurism in a man aged 50 under his care at the Toronto General Hospital. The tumor was first noticed last December, increasing steadily since; impulse and bruit distinct. During the last week, treatment by flexion and instrumental compression alternately as they could be borne has been tried, but with only indifferent results. It was then proposed to apply an Esmarch bandage up to the hip omitting the tumor, but a systolic cardiac murmur contra-indicated anæsthesia. Besides, a second aneurism was discovered in the lower part of the epigastric

region which would probably be injured by the increased pressure resulting from the application of the bandage as proposed. Only two alternatives were left, digital compression and ligation of the femoral.

Dr. Oldright deprecated such serious means as ligation until digital compression had been tried, and related a case of aneurism of the lower part of the femoral, under his care, cured by this treatment after compression for 18 hours by relays of students.

Dr. Zimmerman suggested passing a small trocar through the sac, and introducing a horse hair to be left in situ.

Dr. McCargow said the galvanic needle might be tried.

Dr. Cameron then showed a cysto-sarcoma of the testicle removed from a man aged 60. The testicle was adherent to the sac at many points, and had to be dissected off. The glands in both groins were enlarged, and the disease extended up the cord, so that it was thought advisable to ligate it *en masse* in order to remove as much as possible of it.

Dr. Rosebrugh, of Hamilton, gave a short account of several cases of ovariectomy occurring in his practice.

The Society then adjourned.

Ordinary meeting, June 29th, 1882, Dr. George Wright, President, in the chair.

Dr. Cameron showed a tumor taken from the side of the neck of a woman aged 70. Three years ago it was as large as a hen's egg, hard and freely moveable. Was supposed to be enchondromatous. It became cystic, and as the cysts ruptured from time to time, considerable hemorrhage occurred. Also uterus and ovaries from a young girl who died from puerperal fever in the Lying-in-Hospital four days after delivery. Labor was natural and temperature normal. A few hours afterwards she had a severe chill and temperature rose to 105° . P.M. showed distinct evidence of peritoneal inflammation with considerable sero-purulent fluid. Ovaries much inflamed, left more so than right.

Dr. Oldright reported in reference to the boy whose case he had brought to the notice of the Society at last meeting. He began to take food a few days afterwards, spoke a little, but gradually sank and died. No post mortem.

Dr. King reported a case of pernicious anæmia in a woman who died after four months illness. Pulse usually over 100, highest temperature $102\frac{1}{2}^{\circ}$. Thought the red corpuscles were decreased, but had made no accurate examination of the blood.

Dr. Cameron drew attention to the statement of Dr. Fenwick of London, that in many of these cases there was degeneration of the glands of the pyloric end of the stomach, and disease, usually cancerous or tubercular, of the supra-renal capsules. A general conversation on the treatment of anæmia followed, and on the relative merits of the various preparations of iron in these cases.

Dr. Riddel reported two cases of death from coma; in one, there was pus in the lateral ventricle and in the other a clot in the right parietal region.

Ordinary meeting, July 13th, 1882, Dr. Geo. Wright, President in the chair.

Dr. Macdonald in the absence of Dr. Temple showed a uterus in which rupture had occurred during labour. The woman, a primipara, was unmarried, aged 26, healthy. Labor began at 2 p.m. Saturday, July 8th, membranes ruptured shortly afterwards, during, or before removal to the Lying-in-Hospital. Pains moderate. At or during a pain of greater severity than the preceding ones, though not excessive, she felt something give way. The pain ceased, moderate hemorrhage followed, tenderness over uterine tumor. Collapse gradually set in and was marked at $10\frac{1}{2}$ p.m., when first Dr. Temple arrived. Hemorrhage now profuse. On examination a rent was discovered in the anterior wall of the uterus, through which the hand passed easily into the abdominal cavity. Ether and ergot were administered subcutaneously and long forceps applied, but they slipped. Ether was then given, and delivery affected by turning. Child dead. Uterus responded but slightly to all stimuli used. The woman rallied somewhat, but died the following Monday morning, 39 hours after the rupture. A large quantity of fluid extract of ergot, and five drachms of ether and brandy were given subcutaneously. Post-mortem showed a ragged rent in the uterus 7 inches long, extending from the junction of the neck and body on the left side downwards and to the right, to the os uteri.

Dr. Oldright showed a fatty tumor from the head of a woman, aged 65. Also a small fibroid poly-

pus removed from the uterus on account of persistent hemorrhage.

Dr. McPhedran reported a case of Railway accident to a child aged 9, at Oshawa, in 1876. He saw the case with Dr. Rae. The child was comatose the scalp cut in several places; blood flowed from the mouth, nose and ears, and there was considerable sub-conjunctival extravasation. Two pieces of brain matter, each as large as a bean, escaped from the left ear. The left humerus and clavicle were broken. Complete recovery ultimately took place.

Dr. Macdonald next read a long and interesting paper on "Menorrhagia and Metrorrhagia" with their causes and treatment, which was fully discussed.

Selected Articles.

MITRAL STENOSIS IN A GOUTY HEART.

BY J. MILNER FOTHERGILL, M.D., LONDON.

Our knowledge of valvular affections of the heart does not rest on the detection of a murmur, its seat, the point of its maximum intensity, and its precise time in the cardiac cycle. Nor does their treatment consist in the administration of iron and digitalis promiscuously. Such simplicity may be admirably adapted to the requirements of an examination table, but it is perilously inadequate to the wants of actual practice. For the latter some familiarity with the natural history of each form of valvular disease is eminently desirable, which alone will enable the medical practitioner to read his case aright. There is first the individual to be estimated; then the disease to be measured. Then 2 and 2, or the nearest approach to that numeral in each case, have to be put together; and then 4 is the resultant product. But the equation has points of practical difficulty not represented in the mathematical formula. It is not always easy to determine the precise "2" of each factor. For instance, let me adduce the following case:—

E. A. W—, aged fifty-four, the mother of a family in a south-western county, came to me a little while ago, because her local medical man had found something amiss with her heart. She had been a very active person, but recently had not felt so equal to effort. Yet she had no shortness of breath on exertion, and only a little palpitation on effort at times. She had some dilatation with hypertrophy of the left ventricle, and beyond that a long mitral stenosis-murmur heard to the right of the left apex; but over a limited area only. There were no indications of regurgitation. Now, what

was the significance of this murmur? Was it—(1) The evidence of contracting or sclerotic endocarditis of Rosenstein? was it (2) the result of an old-standing injury, the outcome of a bypast acute endocarditis? or was it (3) a mere peculiarity, a sound produced at the mitral ostium, which has been, and was, and is, and will be without any significance whatever. I am not ashamed to confess that the problem is insoluble to me. The symptoms were quite accounted for by her general condition, for she was bilious and somewhat malnourished. Any failure of power in her could be perfectly accounted for without the hypothesis of contraction of the mitral ostium. There was no thrill accompanying the murmur; but such is usual in the contracting endocarditis of middle age and advanced life. There was no irregularity in the heart's rhythm. Nor would the presence of irregularity or a thrill have cast the least ray or glimmer of light upon the case, in my opinion. There was the unmistakable murmur—seat, maximum of intensity, period in time; and a long murmur to boot. The minutiae of mitral stenosis is not recorded in my note book. There was no possibility of mistake as to the presence of that murmur which is held to be pathognomonic of stenosis of the mitral ostium. There was the murmur, true; but what was the anatomical condition underlying it? That was the essential question to be asked; and, if possible, answered. The murmur of itself was nothing; but its cause was fraught with the most intense interest. With which of the three conditions spoken of above was it casually connected? I summed up the evidence against its being the outcome of a steady progressive diminution of the mitral ostium due to sclerosing endocarditis, and gave a prognosis accordingly. Whether the diagnosis, and with it the prognosis was correct or not time alone can tell. The case was certainly one where contracting endocarditis might be present; for its associations were there as regards the general conditions; but the essential features of mitral disease were not sufficiently prominent to establish its presence.

From the negative aspect of a case like this, it may be well to go on to describe the positive features of mitral stenosis. Assuming that some of my readers are not thoroughly acquainted with the natural history and features of mitral stenosis in all its varieties, it may be well to point out that such mitral stenosis has very different features from the mitral stenosis of young subjects. Perhaps in the dead-house the features are more alike than they are clinically. In the mitral stenosis of the young, set up by acute endocarditis, there is the weak pulse of a small left ventricle; shortness of breath on exertion; enlarged right ventricle; tendency to dropsy in the serous cavities, or the lower limbs. Often there is the "heart cough," of excess of blood in the pulmonic circulation. There is a murmur, presystolic in time, conveyed to the right

of the left apex, often accompanied by a thrill. Such are the leading features. The case may get worse steadily, and even with considerable rapidity; or, as is more commonly the case, the patient is fairly well when quiet, but effort produces distinct shortness of breath, with palpitation. Anything which impairs the strength may elicit some œdema. But though the organism is crippled by the injury done to the mitral valve, the injury itself remains static, and manifests no tendency to go on from bad to worse; or if it does, it is immeasurably slowly. In such a case the administration of digitalis and iron would be likely to be of distinct service.

Now, as to the mitral stenosis of the gouty heart. Here there is a permanent high-blood pressure in the arteries, leading to hypertrophy of the left ventricle, with subsequent hardening of the arteries; the cardio-vascular changes which constitute the first stage of the granular kidney, so ably described by Dr. Mahomed in his recent thesis "Chronic Bright's Disease without Albuminuria." The hypertrophied ventricle contracts with vigor, so overcoming the resistance offered by full arteries to the cardiac systole, and forcing the blood into the aorta, which on its recoil closes the aortic valves with a loud sound indicative of forcible closure; and this forcible closure frequently sets up valvulitis, with subsequent mutilation of the aortic valves. This association of aortic disease with a gouty heart is now well recognised. But the powerful contraction of the hypertrophied left ventricle causes also forcible closure of the mitral valves; they have to sustain a strain equal to the force required to overcome the resistance of a full aorta, and this strain tells upon them in time, leading to sclerosing endocarditis. Such valvulitis may give either stenosis or insufficiency of the mitral valve. When the free edges become puckered or contracted, then insufficiency with regurgitation follows; when the valve curtains are soldered together by a slow inflammatory growth extending from the attachments of the valve, then stenosis with obstruction is the result. Now, whatever the form assumed by the valvulitis, the features of the gouty heart will remain to the end; even when all the phenomena of advanced mitral disease are developed and implanted thereon. The aspect is never that of a simple primary mitral stenosis; nor does the interest centre round the murmur evoked by the morbid process, but attaches itself rather to the associated general condition of the vascular system.

A certain amount of injury to, and deformity of, the valves has gone on before it is sufficient to produce a murmur. But there may be the rational symptoms of a mitral lesion before the ominous murmur is set up. It may be possible to "suspect" a mitral valvulitis before the tell-tale murmur can be heard; there is indeed a pre-murmuric

stage in all probability. It is no part of the design of the writer here to discuss the early stage, but to confine himself to the consideration of stenosis—i. e., of a stage so advanced that it carries with it a murmur indicative of the character of the injury done. What are the features of this form of mitral stenosis?

The patient is elderly; has a more or less pronounced senile aspect. The complaint is that the power to undergo exertion is impaired. There is shortness of breath upon effort. There may be nothing more. The pulse may be feeble and rapid, but there is nothing else about it, nothing characteristic. But on auscultating the heart over a very limited area, at or near the right apex, a tiny "whiff" can be caught. Only over a small spot; move the stethoscope ever so little and it is apt to be lost; certainly lost if the stethoscope be distinctly moved. Here the presence of a murmur is significant, and unmistakeable enough; at least in the majority of cases. But there is also a strong heart very commonly, and a fairly full artery—i. e., there are the associations of a gouty heart along with the mitral stenosis. Usually the nature of the cause of the murmur is clear and patent, and not a matter for reasonable doubt, as in the case given above. Here is a distinct explanation of the failure of power complained. Or there may be a more advanced condition attained before the case came under notice, and the patient is confined to bed with or without some positive patch of pulmonary congestion. But there are the significant murmur, the rational features of mitral disease, linked with the cardio-vascular changes of the gouty heart, or granular kidney, as the case may be. The diagnosis bears on the prognosis and the treatment, especially as to the administration of digitalis. Here there is not an old-standing limited injury to valves, as static and non-progressive as the scar of a burn; limiting the patient's powers, but possessing no tendency to further advance. There is a contracting or sclerosing valvulitis afoot, which tends to go on from bad to worse, because the mitral valve has to bear the strain put upon it by a hypertrophied left ventricle. It is a progressive form of valvulitis. Certainly; but granting that, at what rate is it progressing. "*Quien Sabe!*" as the Spanish girl said when they asked her who was the father of her child." (Kingsley). One would like to know, but how can one get to know? Only, in the language of Oliver Wendell Holmes, by "getting an arc big enough to determine the size of a circle"—i. e., getting a period of observation long enough to calculate the rate of progress. This may entail personal observation, or may be fairly made out by the history of the case. In one case there can be a definite date made out, since which there has been such a falling off in the patient as reveals pretty plainly the time when the lesion began to tell upon the organ-

ism. In another case there will be no data pointing to any special time when the health was obviously impaired. The patient is not very well, feels weak and unequal to exertion, and is scant of breath, and on examination of the chest the murmur of mitral stenosis is audible. Such a case presented itself to me in June, 1880.

A gentleman, aged sixty-seven, who had led an active life, but who latterly had pains which he called "rheumatic," though, he wrote, "his water is more or less high-coloured, and the red sediment is always round the bottom of the pot," which looked like gout—came to me for some "fluttering or palpitation" at the heart. The diagnosis then made was "gouty heart, with mitral stenotic murmur." He was put upon a pill containing some strychnia and digitalis. On this treatment he lost his uncomfortable sensations, and felt very nicely. He went abroad for some time, being conscious of his heart only by some shortness of breath on attempting to climb a hill. A year later he was nicely; his tongue clean, and urine clear; not perceptibly worse. This June he presented himself after an attack of bronchitis, which had pulled him down considerably. The heart was acting irregularly, and the beats were unequal in force. This was due to muscular debility in the heart, the right heart having been severely taxed by the extra demand upon it made by the bronchitis. He had been given carbonate of ammonia, nux vomica, and digitalis by his medical man, according to the formula at p. 367 of the "Practitioner's Handbook of Treatment" (2nd edition), which had suited him well. Indeed, he feels so well that he will not give the heart the rest required for it to recover itself. On his old pill he is doing well, and the muscular tone of the heart is being regained.¹ Even with the recent demand upon the heart there is no evidence that the mitral lesion is perceptibly advancing. In some other cases the inactivity of the valvulitis seems about the same; but in others, again, the progress has been steadily, if not rapidly, downwards. In one case there are violent paroxysms of angina pectoris present.

As to the treatment of these cases, the prevention of the production of uric acid by an approximate dietary and the use of hepatic stimulants, its solution by antilithic alkalies, are measures about whose adoption there can be no question. To keep the blood-pressure in the arteries as low as possible means lessening the strain on the diseased mitral valves on each ventricular systole; and this is attained by reducing the amount of albuminoid waste in the blood, or dissolving it and so letting it escape by the water emunctories. So far so good. But how about the administration of digitalis? To increase the vigour of the ventricular contractions means increase of the strain on the valves. Cer-

tainly; and therefore grave and valid doubts may honestly be entertained about the wisdom of giving digitalis and iron, in a routine manner, in all such cases of mitral valvulitis. When the heart is fairly vigorous, and there are none of the rational symptoms of mitral mischief present, then, probably, it is well to withhold the digitalis and to be content with an appropriate dietary and regimen. But when there are evidences of cardiac failure, then, in all probability, it is well to give the digitalis; albeit in doing so the ventricle does strike harder, and so tax more the mitral valves. Here the ventricle is striking feebly, and the advantage of improving the heart's vigour is not more than counterbalanced by further strain put on the sclerosing valves. In practice each case must be decided by its own indications; and the indications will vary at times in the same case. Nor is it possible to lay down any rules of thumb for the administration of digitalis. The practitioner must weigh carefully the indications for its adoption or the withholding of it in each case. It is not necessary or desirable to give it merely because there is a mitral murmur present; as Rosenstein puts it, "Digitalis helps the heart to pump the blood out of the veins into the arteries," and the fullness of the veins and the comparatively empty state of arteries are the indications for its exhibition; no matter what the murmur, or whether there be a murmur or not. Probably when the rational symptoms of mitral mischief are present it will always relieve them. Whether at times such relief is antagonistic, or prejudicial to the ultimate interests of the case, and therefore it is better to withhold digitalis, is a matter for the exercise of private judgment on the medical adviser. This is certain, the indications for digitalis in such mitral stenosis (or insufficiency, too, for that matter) are not so unmistakeable as is the case in mitral valvulitis in the young, where a distinct injury, be the same more or less, has been wrought; but where there is no tendency in the valves to further mutilation, the distorting process being over and done with, the said injury crippling the organism and leading to death from the disturbance so wrought in the circulation, here digitalis can scarcely do any harm; but the same cannot be said of the sclerosing valvulitis of the gouty heart.—*Lancet*.

ORGANIC MURMURS OF THE HEART.

CLINIC, BY AUSTIN FLINT, M.D., NEW YORK.

I proceed now to the subject proper of my remarks to-day, and I will say in the outset that I assume that many of you have already given considerable attention to the study of endo-cardial murmurs; but although this is the case, I think it will be of service to you to go over the ground again, since it is important that you should have this knowledge

¹ Since writing the above he has had some distinct gouty symptoms.

so readily at command that you can bring it to bear in a practical way at any moment. No apology is necessary, therefore, for introducing this subject.

The most important endocardial murmurs which we meet with are in connection with the left side of the heart, those of the right side being so comparatively rare that they are of much less practical significance. The murmurs which we will study to-day are four in number, two in connection with the mitral valve, and two in connection with the aortic. The first murmur to which I direct your attention is the mitral direct or obstructive. It is also called the mitral systolic from the time at which it is heard. The second murmur is called the mitral regurgitant, and signifies, as the name denotes, insufficiency of the mitral valve and consequent regurgitation from the left ventricle into the left auricle. The first murmur in connection with the aortic valve is the aortic direct. It may imply an obstruction, or if not this a certain amount of roughness of the surface over which the blood passes. The second murmur is the aortic regurgitant, which involves of necessity insufficiency of the aortic valves with resulting regurgitation from the aorta into the left ventricle. It is a matter of importance, I hardly need say, that all should acquire the ability to recognize each of these murmurs when occurring alone, and also when in combination. All four of them may be met with in the same individual, and we should be able in such a case to differentiate the several murmurs. This knowledge involves, in addition, a recognition of what these different murmurs denote.

In the first place, then, how are we to distinguish the several murmurs, singly or in combination? By way of preface I may remark that every adventitious sound about the heart is called a murmur, the word murmur being always used in this connection in a conventional and technical sense. The regular heart sounds themselves, although certain modifications are noted in them also, are entirely distinct from these. These murmurs, as sounds, present differences among themselves. Thus they may be either loud or faint, soft or rough. They are said to be soft when they sound like a current of air passing from a bellows. When they have not this bellows-like character they are called *rough*, and if the roughness is quite marked they are sometimes designated as *rasping*. Again they are sometimes characterized by a distinct musical note. There are, then, three kinds of murmur—as regards the matter of sound, soft, rough, and musical. The sound of the murmur, however, gives us no information as to its origin. Any of the four murmurs pointed out may partake of either of these characteristics. Let us proceed, then, to inquire by what points we may recognize the several murmurs, and differentiate them when they are found in combination.

This inquiry may be best answered, I think, by a reference to the case of the woman whom I now bring before you. In commencing an examination of the patient, I will call your attention first to the marked pulsation noticeable in the arteries of the neck. This sign, I may say, in passing, indicates, as a rule, aortic regurgitation, but we need not, of course, base our diagnosis on this alone. In auscultation of the heart the stethoscope is better than the unaided ear, as it serves to localize the sounds more satisfactorily. Now placing the stethoscope at the second intercostal space on the right side of the chest, but quite near the sternum, I get a distinct rough murmur. My first inquiry in connection with it is, With which of the two heart sounds does it occur? I find that it is connected with the first sound, and it is therefore a systolic murmur. Suppose, now, that I had some difficulty in determining the heart sounds, which might occur, for instance, with great rapidity and irregularity of action. In that case I might place my finger over the carotid artery while listening to the heart, which would give me the desired information, since the carotid pulsation corresponds with the first sound of the heart. Or I might place my hand over the apex of the heart, and if I could then connect the murmur with the heart impulse, which is synchronous with the first sound, I would know that it was systolic. On further auscultation I find that this murmur cannot be heard much below the base of the heart, but when I carry the stethoscope up to the neck I get a murmur which corresponds exactly to that heard at the second intercostal space. We have, then, a rough murmur at the base of the heart, which is systolic, and which is propagated to the carotid artery. The diagnosis, therefore, is a direct aortic murmur, due either to obstruction or to roughening about the aortic orifice. It is possible, however, that this may be an inorganic murmur, due to some abnormal condition of the blood, but as we shall not have time on the present occasion to enter into a discussion, we will assume that it is organic in character.

While listening to the heart in this same situation I recognize a second murmur, which I can very readily distinguish from the other because it follows the latter, and that not continuously. There is a little break between the two, and I find no difficulty in determining that this last murmur is coincident with the second sound of the heart. If, as is sometimes the case, the second sound could not be made out, the interval would be sufficient to indicate that it occurred at the time when the second sound was to be expected. I find, furthermore, that the murmur is propagated almost down to the apex, which shows that it is due to an insufficiency of the aortic valve. If the valve is sufficient or adequate, as we say, there can, of course, be no regurgitation, but if there is regurgi-

tation the blood in thus flowing back always give rise to a murmur, unless, indeed, the action of the heart is exceedingly feeble. The question now arises, Does the intensity and quality of the murmur give any intimation as to the amount of regurgitation? Experience shows that the answer is a negative one, and this is a practical point of considerable importance, since we should naturally infer that if the murmur was loud there would be a large amount of regurgitation. The reverse of this is perhaps more apt to be true, but there is really no definite rule about the matter. We have, then, two distinct murmurs which succeed each other, to and fro, like the ordinary sounds of the heart. There is one point to guard against when two murmurs exist in this way, and that is the danger of mistaking them for a pericardial friction murmur.

I next go down to the apex, wherever that may be. The rule is, that the point where the lowest appreciable impulse is found is the location of the apex; although it is often the case that we get a stronger impulse at other points than this when the heart is enlarged and the shape of the organ altered. One reason for this is that as the heart enlarges it pushes away the lung, and so comes nearer to the chest wall. You must bear in mind, however, that the lowest point of impulse is always the apex, whether it is in the normal position for the apex or not. As you are aware, we listen at the apex for mitral murmurs, and now placing the stethoscope at the apex in this case, I find a murmur which occurs just before the first sound of the heart. There is no difficulty in determining its relation to the first sound, since the latter is always synchronous with the impulse. This murmur is short, rough in character, and can be heard only over a very circumscribed space. It is worth while to note also that it ends abruptly with the first sound of the heart. From these points I know that I have here a mitral direct, obstructive, or presystolic murmur. This is a murmur which precedes the first sound of the heart, and is usually rough; the roughness being of a peculiar quality, which is described as vibratory. This vibratory character is due to the causes of the murmur, which we have not time to investigate minutely at present. I can only allude in passing to the fact that there are usually adhesions, which produce certain changes about the orifice.

Moreover, while listening to the apex I get still another murmur. This one begins with the first sound of the heart, and is of a soft and blowing character, so that it is readily differentiated from the other. An additional characteristic of it, in contradistinction to the latter, is that it is propagated laterally around the chest as far as the scapula. From these points we diagnose a mitral regurgitant murmur, so that we find all four of the murmurs which I have mentioned, present in this

patient. Here, as before, the loudness and quality of the regurgitant murmur affords no indication of the amount of the valvular insufficiency.

There is one point to which I will now call your special attention. Please to mark that two of the four murmurs occur synchronously, the aortic direct and the mitral regurgitant, which are heard with the first sound of the heart; while one, the aortic regurgitant, is diastolic, and one, the mitral direct, is presystolic. Given a systolic murmur, and if it is an aortic obstructive, it will be heard with the greatest intensity at the base of the heart and propagated to a very slight extent below this point. On the other hand, if the systolic murmur be a mitral regurgitant, the greatest intensity is found at the apex, and propagated laterally to the back of the chest. In case both these murmurs exist, as in the present instance, we shall find the characteristics of each. One is rough and the other soft, while each has its special location and direction of propagation. To determine the distinct presence of both we may carry the stethoscope gradually from apex to base, or *vice versa*, when we shall arrive at a point where one murmur ceases to be heard; while if we proceed further the other will presently commence to appear. On this occasion I will not go into the question whether there is enlargement of the heart in this patient, or, if so, whether its character is of the nature of hypertrophy or dilatation, or of both, as is more apt to be the case.

There are some points of interest in connection with the history of the case to which I will now direct your attention. The patient is a native of Ireland, twenty-eight years of age, and she is an embroiderer by occupation. She was admitted to the hospital two days since. Ten years ago she had a very severe attack of acute articular rheumatism (the first in her life, as far as we are able to ascertain), and since then the attack has been repeated regularly every spring, although with diminished intensity. About five years ago she began to suffer from palpitation, and more recently from dyspepsia, which has increased very much during the past year. Her feet have been swollen at times, and she has also suffered from dimness of vision. Her urine is now of a specific gravity of 1010, and contains no albumen. Of course, it is impossible to say with which of the attacks of rheumatism she had endocarditis. This certainly occurred with one of them, and may possibly have done so with all. As this complication is most apt to occur with a severe attack it is probable that she had it with the first. Another thing that renders this probable is that the symptoms of which she now complains commenced five years ago, and, as a rule, endocarditis does not produce these symptoms of distress until several years have elapsed. A few words now as to the subsequent history of the case. Although the patient has the

four heart murmurs, I think the reason that she is suffering more than usual at present is because her general health is run down to a considerable extent. Perhaps there is no condition in which the system is so tolerant (if otherwise in good condition) as organic disease of the heart; and I think that after this woman has enjoyed a season of rest, with the best nourishment and appropriate tonics, she will feel wonderfully better in every way. This is an important practical point, but I cannot enlarge upon it at present.

Our next patient, a man in advanced life, as you see, has another serious trouble besides that of the heart, namely, locomotor ataxia; but I do not propose to discuss the latter on this occasion. I believe, if I remember rightly, that he has all the four murmurs also. On applying the stethoscope to the second intercostal space, a little to the right of the sternum, I find, as before, two murmurs, one with the first, and one with the second, sound of the heart. He has, therefore, both aortic obstruction and regurgitation. Again, at the apex there are the same two murmurs as in the other patient; so that here is a second instance of all the four murmurs existing in combination. I will call your attention in passing to the fact that notwithstanding he has all these murmurs the patient suffers very little from the condition of the heart. What gives him all his trouble is the locomotor ataxia.—*Boston Med. Journal.*

ARTHRITIS OF THE TEMPORO-MAXILLARY ARTICULATION.

Dr. Goodwillie, of New York, *Archives of Medicine*, gives the following history and treatment of this affection:—

Arthritic inflammation may be of a local or constitutional character. The former may be excited by dislocations, blows, luxations, or any lesions in neighboring parts. In the latter by some blood poison, viz.: syphilis, rheumatism, gout, scrofula, etc., and as such must have disease medicines that are antidotes or specifics to the particular blood poison. It is my desire to call attention to my method of producing *extension* in acute inflammation of this joint from either of the above causes.

A. P. B., of Hanover, N. H., 60 years of age, was brought to me by the late Prof. A. B. Crosby, M.D. He had been a man of very robust constitution, but for the past two or three years had suffered with attacks of gout, and was now certainly an object of pity to look upon. The gout from which he had suffered came with terrific violence in both temporo-maxillary articulations, and when he came into my office his teeth were chattering, like one in a malarial chill, from excessive irritation and spasm of the muscles of the jaw. This caused great pressure on the inflamed articular sur-

faces, and gave him excruciating pain, so that he got no relief except from the effects of morphine, hypodermically administered. The arthritis was preceded by neuralgia of the inferior maxillary nerve. On examination of the mouth, I found that his teeth had no decay in them, but some were very much worn by mastication upon the crowns, and some pulps (nerves) were exposed, and in consequence he had pulpitis, causing neuralgia that was followed by acute arthritis.

In the treatment nothing could be done with him except under the effects of morphine and an anæsthetic. On entering my office, a hypodermic dose of morphine was administered, and when under the effects of the drug, he was given nitrous oxide as an anæsthetic. This relieved him from pain, while consciousness to some extent remained. The pulpitis, the exciting cause of the facial neuralgia, was removed by protecting the exposed dental pulps (nerves) from the air and attrition by means of gutta-percha and an interdental splint. The principle of the treatment of arthritis in these joints is the same as in others, differing only in the method of application. I do not know that any extension appliance has ever been used for the relief of arthritis of this joint.



The method that I employ is as follows: In this case the patient was under the anæsthetic effect of morphine and nitrous oxide. If there is any rigidity of the muscles, cautiously force open the mouth and take an impression of either the upper or lower teeth, and a rubber splint is made from the cast to cover over all the teeth in one jaw. Upon the posterior part of this splint is made a prominence or fulcrum (D), so that when the mouth is closed the most posterior teeth close upon it, while all the anterior teeth are left free. The next step is to take a plaster of Paris impression of the chin, and from this make a splint (A). On each end of

the splint is made a place for fastening elastic straps (B) that pass up on each side of the head to a close-fitting skull-cap. See fig. When the apparatus is in place and the elastic straps tightened so as to lift the chin, then pressure is brought to bear on the fulcrum at the posterior molar tooth, and so by this means extension is made at the joints, and the inflamed surfaces within the joints are relieved from pressure; then immediate relief is experienced.

As soon as this apparatus was put on this patient, his pain stopped instantly, and he took no more morphia. He continued for a time his anti-gout remedies, and after some manipulations of the lame muscles of the jaws under electricity, perfect motion was restored. Three cases similar to the above are given in detail, and the Dr. concludes as follows:—(1) That arthritis of this joint, like all other joints, the result of local or constitutional causes, requires proper and prompt treatment, as it may pass in a very short time from its most incipient stage to one of suppuration and destruction.

(2) That arthritis without proper treatment more often results in fibrous ankylosis, and that bony ankylosis is the exception.

(3) That the highly developed muscles of the jaw, from pathological changes, the result of inflammation, or even from misuse, have always more or less impaired motion, and in some cases require more treatment than the joint trouble.

(4) Cases do sometimes occur in which the poisonous effects of overdoses of mercury have had a disastrous result.

[With some slight modification this appliance will be found well adapted to the treatment of fracture of the lower jaw.] ED. LANCET.

TENO-SYNOVITIS: ITS CAUSES, NATURE, SYMPTOMS AND TREATMENT.

BY WM. B. HOPKINS, M.D., PHILADELPHIA.

Teno-synovitis may be defined as an affection usually occurring in the forearm, and characterized by a peculiar creaking of the tendons as they move in their sheaths, depending upon a particular kind of strain to which the muscles belonging to these tendons have been subjected.

Cause—The predisposing cause of the affection is the occupation of the individual, and in studying, therefore, fifteen cases occurring in subjects of otherwise average health, the nature of their employment is worthy of special attention. In three of the fifteen the disease occurred in men employed in a dye-house, whose work consisted in wringing the goods, which had been soaked in the dye; in two the patients were weavers, who threw the shuttle from side to side with the index-finger

of the right hand; one case occurred in a baker, from kneading bread; one in a boiler-riveter, from hammering; one in a car-driver, from using the brake; one in an iron-moulder, from continued use of the shovel; one in a plaster-worker, from stirring plaster with a hoe; one in a washerwoman, from using a clothes-wringer; one in a labourer, who continued to work after receiving a severe contusion of the forearm from the fall of a heavy iron pipe; and one each in a rope-twister, a marble-rubber, and a painter.

In contrasting the above-named occupations with many others requiring far more muscular effort, and giving employment to many more workmen than these, the idea suggests itself that it is not the mere amount of strain to which the muscles and their tendons are put that predisposes to the disease, but rather the kind of effort, which is of a tedious, continuous, monotonous sort. On the other hand, trades which would appear likely to furnish subjects for the disease more frequently than those which have been already spoken of fail to do so. This in some instances can be explained. Gold-beating, for example, where an eight-pound hammer is used almost uninterruptedly for five hours, and is carried from above the shoulder down to the level of the waist would seem to contradict this view, as the disease is unknown to one of the largest gold-leaf manufacturers. A careful study of the movements of the operatives in performing this work, however, shows that the strain is not upon the muscles of the forearm, but rather on those of the shoulder and arm; as the hammer descends simply by gravity and returns by recoil from the elastic block, composed of alternate sheets of gold and animal membrane, to a point where the biceps and deltoid muscles complete the elevation.

The exciting cause of the attack is usually the resumption of work to which the individual is thoroughly accustomed, after a shorter or longer interval, when he is out of practice, and when the parts involved in executing special movements have become less actively nourished; though in the case of the washerwoman, the clothes-wringer was used for the first time, and the rope-twister was doing work which was new to him. In the laborer the attack was of traumatic origin.

Pathology.—The means of determining the exact lesion in this disease are necessarily to a certain extent conjectural, but as the pain and crepitation are coincident in their onset and subsidence, as there is no impairment of motion after recovery has occurred, and as the parts under treatment regain their normal condition in a very short time, it seems highly probable that there is no true inflammatory process at all, certainly none extending beyond the stage of congestion, and that the creaking which exists is due to insufficient lubrication, with consequent dryness, not, as has been sup-

posed, to exudation of lymph. Under rest and counter irritation the congestion very soon disappears, the synovial surfaces pour out their proper fluid, and the tendons once more move smoothly and noiselessly in their sheaths.

Symptoms.—Soreness, amounting to positive pain upon motion or pressure along the course of the affected tendons, inability to use the part, and the presence of the peculiar creaking, which is communicated to the finger on palpation, are the symptoms which denote the existence of tenosynovitis.

Diagnosis.—From its common seat upon the dorsum of the forearm, this affection may be mistaken for fracture of the radius. The history of the case, however, showing that there has been no blow or fall, as a rule, the quality of the crepitus, which is much softer and finer than that of fracture, and like that of cellular emphysema after fracture of the ribs, or that produced by rubbing two pieces of cloth between the fingers, and the way in which the crepitation may be elicited, all leave little chance of error. The disease will not be mistaken for a strain of the muscle, if a careful physical examination is made.

Treatment.—From what has been already said, it will be seen that the disease is at once acute, painful, and disabling. It, however, yields, as a rule, readily to treatment; for the patient can seldom work more than a day after he is attacked, and finding that he exhausts the usual home embrocations, without relief, promptly seeks aid elsewhere. This enables the surgeon to institute treatment before an advanced stage is reached, and permanent mischief done by a deposition of plastic matter. Absolute rest of all the parts concerned is the most important element in the treatment; a palmar splint, therefore, from the elbow to the tips of the fingers, is applied, when the forearm is the part affected. Counter-irritation is next indicated, and may be employed in one of two ways. If the skin is red, a band one inch broad of tincture of iodine should be painted in an oval form around the area over which creaking is felt, while a lotion of lead-water and laudanum is applied within this band. In cases where there is but slight creaking, and no redness of the skin, tincture of iodine may be painted directly over the diseased part, without the employment of any lotion. The dressing is re-applied each day, until all pain, tenderness and creaking have disappeared, which generally occurs at the end of four or five days. After this a roller bandage alone is continued, until the parts have regained their tone.—*Louisville Med. News.*

THE "CHEMICAL LUNG."

On Tuesday night over twenty professional men and others interested in questions of sanitary sci-

ence met together to witness one of Dr. Neale's demonstrations of his "Chemical Lung." The main features of the "lung," and the principal uses for which it is designed, have more than once been described in these columns, either by ourselves or by the inventor of the apparatus. In its inception, the "lung" was, we believe, chiefly intended for the purification of the air in the tunnels of the Underground Railway, though it has not been accepted for this purpose. When the details of the scheme were laid before the directors of the company, either the official mind failed to understand them, or official acuteness perceived that so long as the public are willing to pay for travelling in a filthy atmosphere the company need not be so generous (or foolish) as to undertake any additional trouble or expense in efforts to make the air even tolerably pure. Such may be, and doubtless is, a sensible and proper view for railway directors to take. They are not professional philanthropists, and as regards those who have the charge of the Underground Railway, it may be predicted that when it can be shown that it is to their advantage and interest to make travelling on their line unobjectionable as well as convenient, they will adopt necessary measures and incur the requisite cost, but not till then. Meanwhile, the world is not made up of railway directors, and the "lung" will find fair scope for its activities elsewhere—as, for example, in theatres, churches, chapels, lecture rooms, hospital wards, out-patient waiting-rooms, police-courts, ships' cabins, cellars, etc.

The "Chemical Lung" is really a punkah of peculiar construction, and supplied with a solution of caustic alkali, for which many of the impurities of air vitiated by overcrowding have a special affinity. Not only are sulphurous and carbonic acid gases speedily removed from the atmosphere, but test experiments have shown that organic matters are likewise withdrawn by the "Chemical Lung," or punkah. The experiments performed on Tuesday night were similar to those described by Dr. Neale in our columns on March 11th (p. 415). Their success was *strikingly* and *marvelously* complete. In a room 18ft. by 15ft., 8ft. 6in. high, at the basement of the house, with the windows and door closed, fifty jets of a gas-stove were kept in full flame for an hour before the meeting. The temperature of the room was thereby raised to 85° Fahr. A quarter of an ounce of sulphur was then burned in the room, rendering the air almost irrespirable, except through handkerchiefs, and exciting violent coughing. The punkah, charged with a solution of caustic soda, was then set in motion. In ten minutes the temperature had fallen 15°, and though over twenty persons were present, each having an allowance of only 100 cubic feet, the air was rendered not only *comparatively* but *positively*, fresh, and actually productive of deep and

full inspirations. It is obvious that by means of the "Chemical Lung" not only may foul air be purified, but air may be prevented from becoming vitiated in crowded rooms, and this with *extraordinary certainty*, and at a cost and inconvenience that are almost inappreciable.—*The Lancet*.

TREATMENT OF HÆMORRHOIDS BY INJECTIONS OF CARBOLIC ACID.

Dr. Charles B. Kelsey, Surgeon to St. Paul's Infirmary for diseases of the Rectum, New York, recently opened a discussion on the treatment of hæmorrhoids, at a meeting of the New York Clinical Society, by reading a paper on the treatment by injections of carbolic acid. The paper, which appears in the August number of the "New York Medical Journal and Obstetrical Review," opens with condensed histories of a number of cases, after which he remarks that, beginning this plan of treatment without very much confidence in it, and with the fear of causing great pain, and perhaps, dangerous sloughing, constantly before him, the method is constantly growing in favour with him, and the more he practices it the more confidence he gains in it. With solutions of proper strength the danger of causing sloughing of the tumors is very slight. There are no objections to this method which do not apply equally to others. He has once seen considerable ulceration result from it in the hands of another; but he has seen an equal amount follow the application of the ligature; and he does not consider this as a danger greatly to be feared when injections of proper strength are introduced in the proper way. It is applicable to all cases; is especially adapted to bad cases; and may be used where a cutting operation is inadmissible. It acts by setting up an amount of irritation within the tumor which results in an increase of connective tissue, a closure of the vascular loops, and a consequent hardening and decrease in the size of the hæmorrhoid. Except when sloughing occurs, the tumors are not, therefore, removed, but are rendered inert, so that they no longer either bleed or come down outside of the body. In cases in which the sphincter has become weakened by distension, the injections will also have a decided effect in contracting the anal orifice, as injections of ergot or strychnine do in cases of prolapsus. He has used this method of treatment now many times, and has never, except in one case, had reason to regret using it or to be dissatisfied with its results, so far as he has been able to follow them. Although slow to advocate any one treatment of this affection to the exclusion of all others, he now generally adopts this from the outset in each case, reserving Allingham's operation for any in which the injections may fail. As yet he has met with no such case.

Its advantages over all other methods, provided its results prove equally satisfactory, are manifest. The patient is not terrified at the outset by the prospect of surgical operation, is not confined to his bed, and is not subjected to any suffering. The cure goes on painlessly, and almost without his consciousness. The method requires some practice and some skill in manipulation, in getting a good view of the point to be injected, and in making the injection properly; but this is soon acquired; and he is more and more convinced that the fear of producing ulceration is an exaggerated one, and that when ulceration is produced it is a result either of a solution of too great strength, or of one improperly administered.

[The strength he uses is one of carbolic acid to six of glycerine and six of water; of this *five* minims are injected into each tumor at intervals of a week.]
ED. LANCET.

A METHOD OF PREVENTING THE NECESSITY FOR INDUCED ABORTION.

Dr. Depaul, in one of his recent lectures, recommends, in certain cases, iodide of potassium, regulated diet, and bleeding, to diminish the size of child, and to prevent the necessity of bringing on abortion. He cited the following case in support of his recommendation: Thirty years ago a merchant had married a very rickety wife, who became pregnant soon after marriage. A medical man was consulted, and scarcely knowing what to do under the circumstances, he asked that M. Paul Dubois might be called in, who was obliged to perforate the cranium. A second pregnancy occurred, and on this occasion M. Dubois sent the young woman to M. Depaul. She was then four or five months advanced in pregnancy. Her pelvis measured from $7\frac{1}{2}$ to $7\frac{3}{4}$ centimetres. He told her that it was necessary, in order that she might have a living child, gradually to diminish the quantity of food she took, and to subject herself to a rigorous diet. She was bled many times, and gradually lessened the proportion of food, according to his directions. He followed the progress of the pregnancy, and especially the increasing dimensions of the child. The eighth month arrived, and it appeared to M. Depaul that until then the child had grown very little. He let things take their course, thinking it necessary to bring on premature delivery. Finally, the woman came to the end of the ninth month, and Dr. Depaul was sent for. The head soon cleared the sacro-vertebral angle, and the delivery was easy. The child, a boy, lived; he was very small, but was quite strong enough to be brought up. The same person again became pregnant for the third time. She did not communicate the fact to M. Depaul,

and it was only when she was eight months and a half gone that he was sent for to attend her. It was too late to have recourse to the means used in the previous pregnancy, and Dr. Depaul was obliged to perform cephalotripsy. In a fourth pregnancy he received notice in good time. The regimen used in the second pregnancy was again successful. The child lived, and is still alive. A fifth time he was only called in at the moment of delivery, and only succeeded in removing the child by cephalotripsy. M. Depaul considers this case to be very conclusive, and has likewise collected a certain number of similar facts which induce him to affirm that this method may have a certain degree of success, and to recommend it in cases of vicious conformation of the pelvis, so as to avoid, as far as possible, forced abortion.—*British Med. Journal*.

THE HIPPOCRATIC OATH.—I swear by Appollo, the physician, and by Æsculapius, and Health, and Allheal, and all the gods and goddesses, that, according to my ability and judgment, I will keep this oath and this stipulation: To reckon him who taught me this art equally dear to me as my parents, to share my substance with him, and relieve his necessities, if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the art to my own sons and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give a woman a pessary to produce abortion; with purity and holiness I will pass my life and practice my art; and I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption, and further, from the seduction of females or males, of freedmen and slaves. Whatever, in connection with my professional practice or not in connection with it, I see or hear in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times. But should I trespass and violate this oath, may the reverse be my lot.

SCIATICA.—In a clinical lecture on sciatica, Mr. Jonathan Hutchinson (*Medical Times and Gazette*), says, "In nineteen cases out of twenty in which the diagnosis of 'sciatica' is suggested, there is no affection of the sciatic nerve whatever. They are simply cases of arthritic disease of the hip in one or other of its various forms, acute gout, chronic gout, rheumatic gout, subacute rheumatism, or chronic senile rheumatism. Both by the public and the profession these cases are constantly called 'sciatica.' Our work-house infirmaries are full of chronic cases under that name, and I speak advisedly when I say I feel sure that they are almost all examples of *morbus coxæ senilis*. Of the cases of 'sciatica' which are not hip-joint rheumatism, some are probably affections of the fascia or periosteum near to the hip; a minority are possibly affections of the sciatic nerve itself. In these latter it is the sheath of the nerve which becomes painful. The pain may be darting or may radiate, but it does not pass down the nerve-tubules or in any way make the patient conscious of their course. The diagnosis of true sciatica is to be based upon the discovery of tenderness restricted to the trunk of the nerve, and involving a considerable part of its course. Examples of this are decidedly rare, and their recognition without risk of error is a matter of great difficulty.

BEST METHODS IN PRACTICE.—Dr. Jennings, in the *Peoria Med. Monthly*, says: "In the contest for business and money that most of us are engaged in, I have noticed that those who do the best work win; not necessarily the most profound and learned, but the men who are up with the times—the most industrious, and have an eye for improvement in ways and means. Practitioners of medicine are no exception to this rule. The routine doctor who takes but one medical journal, and confines himself to the identical formulas, medicines and instruments recommended by his college professors twenty years ago, is not the one to win patronage. I am called to treat a case of pneumonia, or rheumatism, or cholera-morbus—complaints that every doctor is presumed to know how to manage. It is not enough that the patient recovers; he would most likely do that without my aid; but I want the recovery to be quick and the means used safe and agreeable. In short, I want to use the best methods; and this may make all the difference in the long run between success and failure. A physician who provides himself with the best appliances of the art, and who studies to make his prescriptions safe, and pleasant to the eye and taste, though the mortality in his practice is no less than that of his routine neighbour, will secure the best patronage and take the most satisfaction in his business. The best methods are not confined to any particular branch or school of the profession, but may include much even of

empiricism. Nothing, it is true, gives the practitioner of medicine so much satisfaction as having established facts and fixed rules to bear on every case that comes under his care; this is what distinguishes the educated physician from the mere empiric; yet not every case can be successfully treated on "general principles;" and we shall often find ourselves obliged to fall back on experience (our own or that of others) without regard to the why or wherefore. And this, it appears to me, is the most important function of the medical journal, namely: to furnish that interchange of experience, and that medium for the discussion of ways and means which is necessary to develop the best methods in the practice of medicine.

It is amazing how soon one finds himself far in the rear if he drops the periodical literature of the profession even for a short time. Two years of experience in southern California without a medical journal, placed the writer of this so far behind the times that he was ashamed to meet his medical brethren, when at the end of that time he resumed practice; and it was several years before the lost ground was recovered.

Speaking in less general terms, it would be profitable to inquire, for instance, what is the best method of utilizing the practical portions of our periodical literature for future reference? To what extent shall we patronize "new remedies" and expensive pharmaceutical compounds? To what extent dispense our own medicines? What attitude assume toward Homœopathy? It is easier to ask questions than to answer them, but there are scores of such which occur to the medical man, besides the more important ones relating to the management of disease and remedies, the answer to which involves a consideration of methods.

NEW INSTRUMENT FOR LOCAL ANÆSTHESIA.—THE *London Medical News* says: "In *Le Progrès Médical* for Saturday last there is contained an account of an ingenious and novel instrument invented by Dr. de Lesser, of Leipzig, the principle of which consists in the application of metal plates, cooled by rapid evaporation of ether, to the surface about to be operated on. The apparatus consists of a nickel case, the base of which is slightly concave, and can be applied to any rounded surface of the body, as the fingers, arms, tumors, buboes, etc. Another side is convex, for adaptation to depressions on the body surface, and it always ensures that a sufficient area shall be influenced by the cold. Two tubes open into this box; through one air can be driven by a hand syringe, through the other ether is introduced. By the passage of the air the rapidity of evaporation can be controlled, and a high degree of cold produced, which, reacting through the conducting sides of the box on the skin to which it is applied, brings about very considerable local anæsthesia. Its inventor

has obtained excellent results with the machine in extirpation of foreign bodies, disarticulations, amputations, etc., of the fingers, and in operations on the nails. He, however, first applies Esmarch's bandage to the part, whether limb or digit, to be operated on. The plan has also been successfully adopted in freezing substances for cutting into microscopic sections."

ARSENIC A PROPHYLACTIC AGAINST INFECTIOUS DISEASES.—Dr. Walter G. Walford, in a letter to the *London Lancet* of May 20th, proposes the administration of arsenic to persons exposed to scarlet fever and diphtheria, believing that if the drug be given in full doses during the incubative stage of these affections, it will forestall their development or modify them to such an extent that they may be treated as trivial ailments. Believing in the germ-theory of the cause of diphtheria and scarlatina, and having noted a statement to the effect that a person who is under the influence of arsenic can not be successfully vaccinated, he began to administer the drug to children not previously afflicted with the disease, in whose families there was an outbreak of scarlatina. During a period of several years he had submitted about one hundred children so exposed to this prophylactic treatment, and among this number two only had developed scarlet fever, and in these the disease presented itself in a very mild form. His experience with the drug as a preventive of diphtheria is limited to his two sons, whom he removed from a school where from local conditions diphtheria had attacked six of the boys, two cases being fatal. Under the administration of arsenic the younger son did not develop any symptom of the disease; but the elder, who was complaining of soreness in the throat at the time he was placed under treatment, showed after six days two small but unmistakable patches of diphtheritic false membrane on his fauces, "although his temperature never rose above 100° F., and his health and spirits scarcely flagged." In a few days he was well. The preparation employed by Dr. W. is the liquor arsenicalis (P. B.). He gives it at first three times a day in as large a dose as can be safely used, due regard being had to the age of the child. Each dose of arsenic may be combined with from fifteen minims to a half drachm of sulphurous acid and a small quantity of the syrup of poppy. This makes a pleasant mixture, of which the children are fond. He thinks that arsenic might be made available as a preventive against many other affections, among which he mentions hydrophobia as an extreme test of its prophylactic qualities.—*Louisville Med. News*.

PHYSICAL DIAGNOSIS.—I have often felt, when seeing hospital patients worried by hammering and long listening to their breathing, in order that the

physician might map out nicely the diseased territory the boundaries of which he could not alter, as if it were too much like the indulgence of an idle and worse than idle curiosity. A confessor may ask too many questions; it may be feared that he has sometimes suggested to innocent young creatures what they would never have thought of otherwise. I even doubt whether it is always worth while to auscult and percuss a suspected patient. Nature is not unkind in concealing the fact of organic disease for a certain time. What is the great secret of the success of every form of quackery? *Hope kept alive.* What is the too frequent fatal gift of science? *A prognosis of despair.* "Do not probe the wound too curiously," said Samuel Sharp, the famous surgeon of the last century. I believe a wise man sometimes carefully worries out the precise organic condition of a patient's chest when a *very* wise man would let it alone and treat the constitutional symptoms. The well-being of a patient may be endangered by the pedantic fooleries of a specialist.—*Boston Med. and Surg. Journal.*

THE ADMINISTRATION OF CHLOROFORM.—The *Gazette des Hôpitaux*, at the end of the *résumé* of the prolonged discussion on this subject which has just terminated at the Académie de Médecine, furnishes the following account of the rules of procedure observed by a *collaborateur* who has been much employed, with constant success, in the administration of chloroform during the last ten years:

1. The compress is to be preferred to all other means. A handkerchief is to be had everywhere, and alarms the patient less than anything else.

2. Fold the handkerchief into the form of the mouth of a horn, and keep it closely pressed against the point of the nose; but only pour the chloroform on the part of it which is not directly in contact with the skin.

3. Its application should be intermitted, but this need not be done in the precisely regulated manner recommended by Professor Gosselin.

4. Give very little chloroform at the commencement, in order to accustom the patient to it and prepare him for the feeling of suffocation. Then, when the first inspirations are over, pour on the chloroform very often, otherwise much time will be lost and complete anæsthesia obtained only with difficulty.

5. Before making the application take care that no article of dress constricts the patient, removing even the string of a cap.

6. Expose the epigastrium, and from the very commencement keep the eye upon it, and *constant* watch the respiration, without caring about the pulse.

Always have a forceps within reach.

8. As soon as the respiration becomes noisy and stertorous, remove the compress and allow the patient to breathe fresh air for a time.

9. When respiration is arrested, seize the tongue with the forceps and draw it out, and immediately commence artificial respiration. If the respiration is not reëstablished after a few seconds, place the head low, forcibly flagellate the cheeks, keep the tongue out, and continue the artificial respiration for five, ten, fifteen, or even twenty minutes, if necessary.

10. When the respiration is noisy, pass into the back of the throat a sponge mounted on a forceps, in order to remove the mucosities existing there, as they frequently do in patients suffering from colds.

11. There is but one contra-indication to the employment of chloroform—namely, advanced phthisis. Affections of the heart are not contra-indications.

12. Hysterical subjects should be distrusted.

13. Alcoholic subjects are very long and difficult in being brought under the influence of chloroform, but they may take it without danger.—*Med. Times and Gazette.*

TWO NEW ANTISEPTICS.—M. G. Le Bon has just presented to the Academy of Sciences two new and very effective antiseptics, the glyceroborate of calcium and the glyceroborate of sodium. Both of these compounds have the advantages of being very soluble, destitute of odor, and free from all toxic action. When exposed to the air they both deliquesce with great rapidity, absorbing from the air an equivalent weight of moisture. Both alcohol and water dissolve twice their own weight of these salts. They are powerful antiseptic agents even in very dilute solution; the most effective in a therapeutic point of view appears to be the calcic salt. It is absolutely innocuous, and it can be applied in strong solution to so delicate an organ as the eye without bad results. In a hygienic sense both can be employed with advantage as disinfectants and as preservers of meat and other alimentary products. M. le Bon has transmitted meat simply coated with a varnish of the glyceroborate to La Plata, and it has arrived in a perfectly fresh and sound condition. He thinks both salts will prove very useful as antiseptics in Lister's mode of dressing wounds.—*Lancet.*

THE ROYAL COLLEGE OF PHYSICIANS ON MEDICAL ADVERTISING.—The Fellows of the Royal College of Physicians of London met in solemn conclave last week, to consider a resolution condemning advertisements of medical books in the lay press, and the giving of medical testimonials to the proprietors of mineral waters, medicinal preparations, etc. An animated discussion ensued, and ultimately the following resolution was passed: "That the system of extensively advertising medical works, and the custom of giving laudatory certificates of medicinal and other pre-

parations and medical and surgical appliances, whether for publication or not, is misleading to the public, derogatory to the dignity of the profession, and contrary to the traditions and resolutions of the Royal College of Physicians."

It was pointed out that extensive advertising in the medical press was deceptive, as tending to associate special names with particular diseases. An interesting feature of the debate was the confession by a distinguished physician, that he received five guineas for a certificate praising a "favorite natural aperient." We now know the value of the much-advertised recommendations of this water.—*Med. News.*

LIGATURE OF THE INNOMINATE ARTERY.—MR. THOMPSON'S patient died on Thursday, July 20, the forty-second day after ligature of the innominate artery. There was no recurrence of bleeding after the thirty-ninth day. The sinus was found to terminate in an ulcer, which involved the anterior wall of the junction of the innominate, carotid, and subclavian arteries. The innominate and carotid were filled with clot; the subclavian contained a clot occluding it to the extent of half an inch. The position of the ulcer was on the distal side of the ligature, the constricted portion of the innominate not being involved. The hæmorrhage had apparently taken place from the innominate, as there was a recent blood-stain on the cardiac side of the clot. None of the vessels were pervious to water forced in with a syringe. The aorta was atheromatous. Consolidation was proceeding satisfactorily in the tumor. Excluding the successful case of Dr. Smith, of New Orleans, this is the second longest survival on record, Graefe's case having reached the sixty-seventh day, and Cooper's the thirty-fourth.—*British Med. Journal*, July 29, 1882.

ACUTE PNEUMONIA WITH FIBRINOUS EXUDATION IN THE LARGE BRONCHI.—Dr. Cezary, of Algiers, calls attention to cases, happily rare, of acute pneumonia in which the fibrinous exudation extends to the large bronchi and plugs them up. In these cases there is absolute dulness, but the bronchial breathing and bronchophony and vocal fremitus entirely disappear. The characteristic expectoration is suppressed, dyspnea is extreme, and death occurs with orthopnea. The signs are those of pleurisy with great effusion. The differential diagnosis between this form of pneumonia and pleurisy is impossible. Dr. Cezary has twice punctured, thinking that effusion was present.—*Gaz. Hebdom.; London Pract.*

SHORT SIGHT A FASHION.—A recent order issued to the Russian army forbids any officer to wear either a *pince-nez* or eye-glass while in uniform. Spectacles also are only to be used upon

the issue of a medical certificate notifying that the wearer absolutely needs them. It seems that the fashion for eye-glasses and *pince-nez*, which has lately sprung up in the Russian army, has made four-fifths of the officers to have bad sight.—*Med. Times and Gazette.*

EXAMINATION OF SPERMATIC STAINS.—Vogel (*Wiener Med. Blatt.*, 1882) recommends the following method: The stain is softened with water, and in the moist condition is taken off with a knife, avoiding as much as possible the removal of any of the tissue on which it lies. A few small hairs are unimportant, however, as they are readily dissolved from the scrapings on the object-glass or slide with a drop of concentrated sulphuric acid. After two minutes one or two drops of tincture of iodine are added, the whole stirred carefully with a glass rod, and covered with a large cover-glass, which, if the dark-brown mass be too opaque, may be pressed down a little, unless it be intended to transfer smaller portions to other slides. The spermatozoa are stained distinctly brown, and are visible under the microscope in their whole contour, but it is not possible to keep the staining in longer than twenty-four hours unless the sulphuric acid be washed out, when the preparation is soon spoiled. Alcohol at once decolorizes the spermatozoa, showing the staining to be only superficial.—*Boston Medical and Surgical Journal*, August 10th, 1882.

NITRITE OF AMYL has been used hypodermically by Dr. J. J. F. Barnes, as described by him in the *British Medical Journal*. In thirty or more cases a ten per cent. solution in rectified spirit was used. No unpleasant results were observed. The action of the drug was immediate, and the phenomena were similar to those obtained by the ordinary method of administration. Ten minims of the solution, equivalent to one minim of the amyl, was the dose usually given by Dr. Barnes. He states that the solution in spirit, kept in an ordinary stoppered bottle, does not readily lose its efficiency.—*King's Co. Proceedings.*

HYDRATE OF CHLORAL AND TINCT. IODINE.—According to the authority of Pavesi, the therapeutic powers of tincture of iodine are increased by the addition of chloral hydrate, which dissolves in it without decomposition, and is readily miscible with water without precipitation. This combination possesses remarkable hemostatic virtues, from its marked coagulating powers over albumen.—*Pacific Medical Journal.*

Billroth having declined to leave Vienna, Prof. Volkmann, of Halle, has been chosen as Langenbeck's successor at the University of Berlin.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications collected on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada LANCET," Toronto.

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TORONTO, SEPT., 1882.

The LANCET has the largest circulation of any Medical Journal in Canada.

TO OUR READERS.

The ever-increasing success of the LANCET is to us a matter for congratulation, and we enter upon the 15th volume with a determination to continue the high standard we have already maintained, and if possible to make the journal still more worthy of the support and encouragement of the profession in Canada. Owing to the very large and increasing circulation of the LANCET, it is much sought after by advertisers who find it to their advantage to patronize journals of large circulation; we have therefore been compelled to increase the number of our advertising pages. We wish our readers, however, distinctly to understand that this does not in any way diminish the amount of reading matter. We give precisely the same amount of reading matter every month, whether the advertisements are few or many. We make this statement because of an impression which prevails in some quarters, that the number of advertising pages being increased the reading matter is necessarily diminished. A casual reference to the pages of the LANCET for the past ten years will show that this is not the case.

SODIUM SALICYLATE IN ACUTE RHEUMATISM.

After a prolonged trial of salicylate of soda in the treatment of acute rheumatism, the profession has come to regard it as one of the most valuable remedies yet introduced into the materia medica. As to its *modus operandi*, observers are by no means agreed, although many believe that its

action is as nearly specific as is the action of quinine in intermittent fever. In an article in the *Practitioner* for June, '82, Dr. Clouston says that its effect on the duration of the disease is most marked, for in 63 per cent. of the cases the acute stage did not last over three days; the pain was relieved in a few hours, and the remainder of the sickness was free from severe symptoms. He publishes a table showing the results obtained by other observers, nearly all of whom agree as to the value of this remedy, and also that the tendency to complication is diminished in proportion to the shortening of the acute stage, and that relapses are less frequent. Dr. Clouston believes that success in the treatment depends, to a considerable extent, upon the quantity administered at each dose, for if it be too small the acute stage will not be cut short, or the pain relieved, and if too large, headache or other uncomfortable symptoms will be produced. The dose recommended as the best in the majority of cases, is 10 grains every hour until the symptoms are relieved. If, from any cause, he finds it necessary to suspend the sodium salicylate, he administers salicine in doses of 15 or 20 grains three times a day, partly with a view to its tonic effect on the system, and partly from its well-known efficacy in the treatment of the disease under consideration salicine being converted into salicylic acid in the system. Dr. Clouston gives an epitome of 27 cases treated by him, from which the following conclusions may be drawn: viz., that the best results are obtained by early treatment, and that after the acute symptoms have disappeared, the medicine should be discontinued gradually, and if any signs of a relapse appear, it should be immediately resumed. We have used salicylate of soda for several years, both in hospital and private practice, and can fully endorse Dr. Clouston's conclusions. The prescription we generally use is as follows:—

R. Acid salicyl..... $\bar{3}$ ij.
Sodæ carb..... $\bar{5}$ iss.
Syr. limonis..... $\bar{3}$ j.
Aquæ cinnam...ad. $\bar{3}$ viii —M.

Sig.—A table-spoonful every two hours.

Some physicians give as high as 20 grains every two hours, but there is danger of sudden collapse from large doses of this remedy. Dr. Brinton (*Medical and Surgical Reporter*) administers it in 20 grain doses every two hours until the pulse is reduced, and states that in 20 grain doses there is

no danger of collapse so long as the pulse does not fall below 84 to the minute. Even if heart lesions be present, by watching the pulse carefully all danger from collapse may be avoided. He combines it with liquor ammoniæ acetatis, and thinks it acts better than when given alone.

SEWERAGE AND DISPOSAL OF SEWAGE.

Our morning contemporary, the *Toronto Globe*, has been doing good service in drawing public attention to the necessity for a system of sewerage for Toronto and its suburbs, and in acquainting the people with the topography of the different localities, and indicating the best course for some of the future trunk sewers. There are a few points which the *Globe's* articles bring to mind, and to which we deem it desirable to draw attention.

The great want of the present system, indeed, the absolute necessity, is some means by which the sewage of the city shall be diverted from the bay. It is a sad fact that such a vast amount of filth has already been poured into what should be, but is not, a delightful basin of pure water. There are three ways in which this may be accomplished, all of which were fully discussed in the *Journal of Sanitary Science*, several years ago. One of these modes is similar to that proposed in the *Globe*; the other two aim at returning to the soil that which is taken from it in the growth of vegetation or food. There are two strong reasons why one of these ought to be adopted; one is, that such a course would prevent such serious impoverishment of the soil as has taken place in some of the New England States, the possibility of which in Ontario ought not to be overlooked by either the urban or rural population; and the other that the earth, especially in connection with the processes of vegetation, is a wonderful disinfectant, and will effectually prevent any future evil effects upon health, of the decomposition of the excremental matter in the sewage. The dry earth system, with daily removal by cartage, is safe, gives perfect freedom from sewer gases, and is successfully carried out in some large cities; but as Toronto is virtually committed to the water-carriage system, that system need not now be discussed. With the water-carriage system at present adopted, there are two methods by which the sewage might be utilized in the soil and disinfected or destroyed,

viz., by the manufacture of a portable manure, or by the application of the fresh undecomposed sewage to the soil, by irrigation or downward filtration, and it is a question, which should be seriously considered instead of being put aside as impracticable, whether it would not be better to have the sewage of the city used in one of these ways, even at considerable cost to the city, than to continue to pour it into the water front of the lake, with the constant risk of air and water contamination.

Both east and west of Toronto there are many hundreds of acres of light unproductive soil which might profitably utilize the sewage of the city. In England enormous quantities of vegetables and grass for the grazing of cattle are grown upon soil which had been previously almost barren; and near Paris a gravelly waste has been converted into luxuriant beds of garden produce, by the application of fresh sewage to the soil. There, it is thought best to have the sewage safely disposed of in this way, even if it means an annual outlay of considerable money by the cities interested. It would be more economical to have the Toronto sewage manufactured into a portable manure or pumped upon a sewage farm than to build a trunk sewer to carry it from the Don to deep water near Scarboro' Heights.

In any case, an intercepting trunk sewer along Front Street to the Don may be regarded as indispensable, and the sooner it is built, with proper provisions, the better. There are two special points in connection with it to which we would desire to draw attention: First, the effect upon the atmosphere of the eastern section of the city of pouring all the sewage into the water at one point by the trunk sewer, instead of, as at present, at many points hundreds of yards apart, and the greater risk at the same time of contamination of the water supply. Pouring a large quantity of sewage into the still water of the lake is a very different thing, it must be remembered, from pouring it into a flowing river.

The second most important point to be considered in connection with the trunk sewer is, that in all intersecting sewers like the one proposed, there is great liability to increased accumulation and return of the sewer gas. This great disadvantage must be overcome before the requirements of public health can be regarded as satisfied. The

flow of the proposed intercepting sewer for a considerable part of its course, will be in a measure the reverse of that in the present main sewers which will pour into it, that is, toward an acute angle with the flow in the supply sewers; as from a point some distance west of Yonge street the trunk will have to take a course bearing much northward of east. The difficulty here indicated can be partially remedied by altering the direction of the lower end of the present main sewers and turning the flow in them toward the south-east for as great a distance as possible before they connect with the main trunk. Closed pipes will accumulate, retain, and, in certain conditions, return vapors and gases generated in them unless these are constantly removed by some special system of ventilation, and the great desideratum in sewerage reform is some efficient method by which these vapors and gases, generated and given off in the decomposition of the sewage in its usual slow or retarded passage through the common sewers, shall be either destroyed, or, if that be impossible, carried a safe distance away. Open gratings in the streets of a populous district are as the *London Lancet* says "not simply nuisances, but traps for the unwary." There is no question as to the poisonous nature of sewage-gas, and from open street gratings it may not be perpetually given off, but come out in gusts, as determined by the varying distribution of heat in the sewers and the relative temperature of the external atmosphere, and be inhaled by the travelers on the streets, or in a calm atmosphere it may even enter in poisonous quantities an open window of a neighboring dwelling. It is consequently unsafe and not in accordance with the requirements of health to ventilate the sewers directly into the streets, as is now done in Toronto and most cities. With an intercepting trunk sewer the danger would be greatly increased; and this not only in connection with the street-gratings but also in connection with the traps of the house-drains and soil-pipes.

The only safe and rational plan, as it appears to us, is to ventilate the sewers by pipes of different heights rising above the level of the houses, so that the gases may be conveyed to and mingled with the higher strata of the atmosphere, beyond the reach of respiration; and to have fitted to every house a properly constructed "disconnecting chamber," for cutting off any flow of gas tend-

ing toward the house. In conclusion, it may be stated that provision for the frequent and free flushing of the sewers, to prevent decomposing accumulations, will greatly lessen the amount of gases in the sewers, and consequently the danger therefrom.

THE TORONTO CITY HALL.

The unhealthy condition of the Toronto City Hall has been a matter of public notoriety for some time past, but as yet no steps, so far as we are aware, have been taken to put it in a healthy condition. This neglect is owing in great part to the conflicting opinions respecting the possibility of making the hall habitable from a sanitary point of view, and to the suggestion that new buildings would be required. A report of the condition of the City Hall was made in February last by Dr. Oldright but it is of a piece with all his public utterances, so utterly unpractical as to be almost completely valueless. In the report he has given a very full description of the filthy, and defective sanitary condition of the building, but not one practical hint as to how it may be remedied. He jumps at once to the conclusion that a new City Hall is absolutely indispensable. This opinion, as the *Globe* very properly remarks, "is utterly unwarranted. The statement that the condition of the Hall is beyond remedying is on the face of it, the absurdest of nonsense. To assert it, is to say that sanitary science is a humbug, and boards of health mere 'shams.'" We regret very much that at the very outset of our career in sanitary reform, such a report as the one above alluded to, should have become public, as it casts a serious reflection upon the resources of sanitary science to say that the defects in the drainage, ventilation, etc., of the City Hall cannot be remedied, except by the construction of new buildings. It will be in the recollection of some of our readers that at one time in the history of the Toronto General Hospital, that building was in a somewhat similar condition to the City Hall at the present time, and there were so-called sanitarians and unpractical men who said it never could be improved, and that new Hospital buildings, would have to be erected in some other part of the city; but fortunately for the Hospital, some practical men on the board of trustees, assisted by the medical superintendent and

a competent architect, took the matter in hand and very soon the buildings were put in a perfectly sanitary condition, and to-day there is no public institution in this city or country more perfectly drained and ventilated, or in a cleaner or healthier condition.

The suggestion of a leading alderman "that the matter should be gone into by some *competent* person to see if the buildings could not be put into a healthy condition" is a good one. Two prominent citizens, men of great experience, estimate that the cost of overhauling, draining and ventilating the City Hall including the substituting of steam-heating apparatus, need not exceed \$2,500. For a few hundred dollars a layer of fresh earth and a concrete floor could be put under the entire building, and thus for less than \$3,000 the building could be made perfect in a sanitary sense.

From the remarks in the *Globe* anent Dr. Oldright's report, Mr. Gordon Brown must also have come into "rivalry with that gentlemen" in some way, or perhaps the latter "has beaten him in a contest for the senate of Toronto University, several years ago."

AMMONIA IN BREAD-MAKING.—The *Scientific American* in a recent article, calls attention to the popularity and usefulness of carbonate of ammonia as a leavening agent. It says:—The carbonate of ammonia is an exceedingly volatile substance. Place a small portion of it upon a knife and hold over a flame, and it will almost immediately be entirely developed into gas and pass off into the air. The gas thus formed is a simple composition of nitrogen and hydrogen. No residue is left from the ammonia. This gives it its superiority as a leavening power over soda and cream of tartar when used alone, and has induced its use as a supplement to these articles. A small quantity of ammonia in the dough is effective in producing bread that will be lighter, sweeter, and more wholesome than that risen by any other leavening agent. When it is acted upon by the heat of baking the leavening gas that raises the dough is liberated. In this act it uses itself up, as it were; the ammonia is entirely diffused, leaving no trace or residuum whatever. The light, fluffy, flaky appearance, so desirable in biscuits, etc., and so sought after by professional cooks, is said to be imparted to them only by the use of

this agent. The bakers and baking-powder manufacturers producing the finest goods, have been quick to avail themselves of this useful discovery, and the handsomest and best bread and cake are now largely risen by the aid of ammonia, combined of course with other leavening material.

THE ROYAL COMMISSION ON THE MEDICAL ACTS.—The report of the Royal Commission on the Medical Acts has just been published in the London journals. The most important clause is the following: "There shall be one General Medical Council; that in each of the three divisions of the United Kingdom, there shall be a Divisional Board, representing all the medical authorities of the division; that the right of admitting to the *Medical Register* and a general control over the proceedings of the Divisional Boards shall rest in the Medical Council; and that subject to such control, each Divisional Board shall, in its own division conduct the examinations for licence." This arrangement, as will be seen, is somewhat similar to that which prevails in Ontario, except that there will be three examining boards instead of one. The Commission also proposes that persons with Colonial diplomas may register in England without further examination as *Colonial practitioners*.

CANADA MEDICAL ASSOCIATION.—The following titles of promised papers have been received up to August 23rd. New Operation for Closure of Hare Lip and Fissured Palate immediately after Birth.—Dr. Goodwillie, New York. Stone in the Bladder.—Dr. Walker, Detroit. Some Points in Forceps' Application.—Dr. A. A. Brown, Montreal. The Electro-Magnet in Ophthalmic Practice.—Dr. Dr. Buller, Montreal. Exhibition of a Series of Specimens Illustrating the Modes of Termination of Aneurism.—Dr. Sutherland, Montreal. Axis Traction.—Dr. J. C. Cameron, Montreal. Cervical Ribs, and Notes on the Treatment of Mammary Abscess.—Dr. Shepherd, Montreal. Exhibition of (1) Model of a Gynecological Couch; (2) of a new form of Speculum; (3) of an Ether Inhaler.—Dr. Alloway, Montreal. Rare Form of Uterine Tumour.—Dr. Gardner, Montreal. On Certain Obstructions in the Air Passages.—Dr. Hingston, Montreal. Echinococcus Disease in America.—Dr. Osler, Montreal. Demonstration of the Bacillus of Tuberculosis.—

Drs. Osler and W. D. Oakley. A Peculiar Form of Fever.—Dr. Harrison, Selkirk. Polypoid Fibroma, of the Bladder.—Dr. Fulton, Toronto. Parasitic Affections of the Ear, and three Cases of Eczema.—Dr. J. Ferguson, Toronto.

CARBOLIC ACID INJECTIONS IN PUERPERAL SEPTICÆMIA.—In the August number of the *N. Y. Medical Journal*, Dr. Polk, of the Medical Department of the University of the City of New York, reports a case of puerperal septicæmia in which hypodermic injections of a two and a half per cent. solution of carbolic acid were followed with excellent results. The solution was warmed to 100 F. and injected every four hours. The temperature was almost immediately reduced when it was used, and went up again when its use was discontinued for a very short time. The urine was examined as a precautionary measure, to determine the amount of sulphates present, and this was repeated from time to time, as it is maintained that absence of the sulphates is the first sign of carbolic acid poisoning. The urine was tested as follows:—A drop or two of nitric acid was first added to dissolve the phosphates, if present; then a solution of barium chloride, the reaction causing a white precipitate of barium sulphate. This plan of treatment is worthy of a more extended trial.

MICROCOCCHI IN THE BLOOD IN MALIGNANT MEASLES.—Dr. Keating, of Philadelphia, has been making some investigations with regard to the presence of micrococci in malignant measles, and their absence in the milder cases. His article will be found in the *Medical Times*, August 12th, 1882. He states that the moment malignancy appeared, an examination of the blood showed micrococci in abundance in the field. He says that they not only obstruct the capillary circulation, but enter and destroy the blood corpuscles. Upon the strength of Dr. Formad's experience that alcohol most readily checked the development of micrococci in culture solutions, he withdrew the carbonate of ammonia and digitalis treatment and put his little patients upon whiskey in small and frequent doses, combined with tonic doses of citrate of iron and quinine, and the results were highly satisfactory. He alludes in this connection to the well-known efficacy of alcohol and calomel in puerperal septicæmia. He also refers to the value of alcohol and corrosive sublimate, and the

vegetable acids, as lemon juice and claret in malignant diphtheria.

MEDICAL SECTS IN THE U. S. ARMY AND NAVY.—The Committee on Medical Legislation of the American Institute of Homœopathy recently corresponded with the head of the Medical departments of the United States Army and Navy, in order to ascertain if any discrimination was made between the diplomas of Homœopathic Medical Colleges and those of the "regular school" in the admission of candidates to examination for the medical corps. Mr. Chandler, Secretary of the Navy, replied that no discrimination was made in favour of or against any school. "The only requirements of the department are that a candidate in addition to his moral and physical qualifications shall possess the necessary professional and literary knowledge to enable him to pass the established examination."

ONTARIO PUBLIC HEALTH DOCUMENTS.—We have received a communication from "Mild Critic," too late for this issue, suggesting that "in view of the outraged English in the construction of the documents being issued by the Provincial Board of Health, and of the incorrect and imperfect character of the instructions," a "resolution be passed at the coming meeting of the Medical Association asking the Registrar-General to have them withdrawn as far as possible, and revised and corrected before any further distribution of them be made. The writer thinks that the profession outside of Canada, where many of the documents will doubtless go, should not be allowed to think that the profession here are in ignorance of the character or approve of such literature—the like of which "was never issued from any Governmental department."

NOVA-SCOTIA MEDICAL SOCIETY.—The 13th annual meeting of the above-named society was held at Kentville, N. S., on the 28th and 29th of June, 1882. Dr. H. McPherson, of North Sydney, Vice President in the chair. The following officers were selected for the ensuing year:—President, Dr. W. B. Slayter, of Halifax; 1st Vice, Dr. H. McPherson, of North Sydney; 2nd do., Dr. H. Shaw, of Kentville; Sec. Treasurer, Dr. J. Somers, of Halifax. The next meeting will be held in Truro, on the third Wednesday in June, 1883.

A GOOD OPPORTUNITY.—The proprietor of the Belmont Retreat, a Private Insane and Inebriate Asylum, in Quebec, being advanced in years, and feeling that resting time has come, would take a partner who might eventually become his successor, or, if an opportunity offered, would sell out. This is an excellent chance for a young medical man with capital, who would be willing to cultivate a taste for the management of such an institution. The above institution, which was established in 1864, stands in the middle of 30 acres of excellent land, in garden, meadow, and lawn, and has accommodation for about 50 patients. It has a Government license and an annual Parliamentary grant. For further particulars apply to G. Wakeham, Quebec.

PRENATAL HOUR-GLASS CONTRACTION.—Dr. Tyson, of Philadelphia, reports in the *Medical Times*, two cases of what is called "prenatal chaton," or hour-glass contraction, a rare occurrence in the early stages of parturition. He was led to publish these cases from observing a case in a New York Medical Journal, which, through mismanagement, (version and craniotomy) had terminated fatally. In his first case he used the forceps and overcame the resistance, and in the second, ergot and anæsthesia were all that was required.

LIGATURE OF THE VERTEBRAL ARTERIES FOR EPILEPSY.—Dr. Alexander, of Liverpool, reports (*Medical Times and Gazette*), the successful treatment of a number of cases of hopeless epilepsy by tying the vertebral arteries. He at first tied one artery, and this succeeded in three cases, but in other cases both vessels had to be ligated before a cure was effected. He has tied both vessels at the same operation with no bad results. For full description see quarterly retrospect in another column, by Dr. Stewart, of Brucefield, Ont.

ABDOMINAL DRAINAGE.—The following new method of drainage after ovariectomy adopted by Dr. Kehren, (*Centralblatt für Gynecologie*, 1882), is worthy of more than a passing notice. He inserted into the cavity of the abdomen three rubber tubes into which he introduced disinfected wicks of the thickness of the little finger. The external bandage was soon wet through by the secretion, and had to be changed three times during the first two days, after which it ceased altogether.

THE PROPOSED AMERICAN MEDICAL JOURNAL.—The *Medical Herald*, (Ky.) says: that Dr. I. Minis Hayes of Philadelphia is the only man in the country possessing all the requisites to successful editorship of the proposed Medical Journal of the American Medical Association, and nominates Dr. Hayes for editor-in-chief, and Dr. R. J. Dunglison assistant editor.

DUFFERIN RIFLES.—We are pleased to observe that Dr. W. T. Harris of Brantford, Surgeon to the above Battalion, has succeeded in winning the "Dufferin Medal." His score was 40 out of a possible 50, ten rounds at 500 yards. This is a highly valued prize, and Dr. Harris is to be congratulated upon his success.

BRITISH DIPLOMAS.—Drs. R. J. B. Howard, M. D., of Montreal, and M. A. Nicholson, M.D., of Ottawa, have successfully passed the examination for the diploma of the Royal College of Surgeons, Eng., and were admitted members in July last.

H. W. Thornton, M.D. (McGill), and H. H. Chown, M.D. (Queen's), have been admitted licentiates of the Royal College of Physicians of London.

DISTINGUISHED VISITORS.—The following gentlemen are shortly expected to visit this country: Mr. Herbert Spencer, Dr. W. B. Carpenter, (author of "Human Physiology"), Dr. Morell McKenzie, Dr. Houghton, of Dublin, and Hon. Dr. Lyon Playfair. Dr. Carpenter is now in Montreal.

OBITUARIES.—The following deaths are announced in our exchanges:—Prof. Nikolaus Friederick, of Heidelberg, in the 57th year of his age; Prof. F. M. Balfour, the distinguished Embryologist; Dr. Wm. H. Mussey, of Cincinnati; and Dr. Andrew Buchanan, late Prof. of Physiology in Glasgow University, at the advanced age of 84.

SANITARY CONVENTION IN ST. THOMAS, ONT.—A sanitary convention will be held in St. Thomas, under the auspices of the Provincial Board of Health, on the 19th and 20th of September, inst. (See advertisement).

Dr. Roddick has become associated with Dr. Ross in the editorial management of the *Canada Medical and Surgical Journal*, Dr. Molson having resigned owing to other engagements.

HAMILTON CITY HOSPITAL.—The new City Hospital at Hamilton is nearly ready for the reception of patients. This fine building is an ornament to the city, and a much needed improvement.

REMOVALS, &c.—Dr. Blair has removed to Three Rivers, Que. Dr. J. G. Kittson, (formerly surgeon to the North-West Mounted Police), has commenced practice in St. Paul. Minn.

MEDICAL MATRICULATES TORONTO UNIVERSITY.—The following gentlemen passed at the June examination :—D. R. Johnston, 1st scholarship; C. F. Noecker, 2nd scholarship; C. S. Haultain, C. J. Patterson, J. B. Reid, and McJ. Farrish.

APPOINTMENTS.—Dr. J. W. Whiteford has been appointed Attending Physician to the Winnipeg General Hospital.

Dr. D. W. Cheever has been appointed Prof. of Surgery in Harvard Medical College, *vice* Dr. H. J. Bigelow resigned.

Dr. John Chiene has been appointed Professor of Surgery in the Edinburgh University as successor to the late Prof. Spence.

T. Grainger Stewart, M.D., of Edinburgh, has been appointed one of Her Majesty's Physicians, *vice* Sir Robert Christison Bart, deceased.

Prof. Nothnagel, of Jena, has been appointed Professor of Special Pathology and Therapy in the University of Vienna.

Prof. Bergmann of Würzburg has been appointed to the Chair of Surgery in the University of Berlin, vacated by the resignation of Prof. Langenbeck.

CORONER.—Dr. N. Washington, of Orangeville, has been appointed Coroner for the County of Dufferin.

The St. John *News* states that diphtheria is very prevalent at Grand Manan, N. B.

Books and Pamphlets.

THE PHILOSOPHY OF INSANITY, CRIME AND RESPONSIBILITY, by Henry Howard, M.R.C.S., Eng. Montreal: Dawson Bros.

Dr. Howard has been connected with asylums for the treatment of insane for nearly a quarter of a century, and therefore anything from his pen is deserving of a careful perusal. This we have endeavored to do, although we must confess that we

have had some difficulty in following the writer in his explanations of the supposed pathology of insanity. Dr. Howard's views are strongly materialistic. He regards imbecility as the result of teratological defect, and insanity the result of pathological defect in the brain. The work is divided into two parts; the first part, consisting of 52 pages, is devoted to a "definition of insanity and imbecility," and the second part to the "medical jurisprudence of crime and insanity, criminal responsibility." The author fully explains his views on the vexed question of legal criminality. He has been much interested in the subject of the medical jurisprudence of crime and insanity for many years, having taken part in several criminal trials in which the plea of insanity was entered by the counsel for the defence. The late Hayvern case is still fresh in the memory of our readers. He was tried for the murder of a fellow-prisoner in the penitentiary named Salter. Dr. Howard, for the defence, testified that the prisoner was insane, and that he had committed the deed through "uncontrollable impulse." Notwithstanding this evidence, Hayvern was convicted and executed. A good deal of controversy arising out of the case took place at the time, and several excellent authorities, in the main supported Dr. Howard's contention.

He gives in his work the criticisms on the case which appeared in the different journals, and also an article on the "Brains of Criminals," by Dr. Osler, published in the *Canada Medical and Surgical Journal* for February, 1882. Although Dr. Howard recognizes stages of insanity, he does not approve of any such division of insanity as partial insanity, or moral, functional or idiopathic. Speaking of the cause of death in insanity, we are unable to accept the author's theory that it "is caused by the arresting of molecular motion, and that the cause is due to coagulation of nerve fluid, either from chemical change or mechanical lesion;" or that "turbidity of the electric fluid" causes insanity. Some very interesting observations have been made by the author regarding low temperature in the insane. He gives a history of twenty-three insomnic and analgesic cases examined by him, in nearly all of which the temperature was from 1° to 2¼° below normal.

By way of an appendix the author has given a number of extracts on criminal cases from Mr. Serjeant Ballantine's "Experiences of a Barrister's

life," which will be found interesting. In conclusion the author expresses his indebtedness to a number of friends for useful information and valuable assistance given him from time to time, and assures the judicial, legal and medical gentlemen who differed from him in his views of the mental state of Bulmer and Hayvern, that if in the heat of discussion he made use of one word that caused any of them annoyance, he did so unintentionally, and asks to be permitted to withdraw that word.

A POCKET-BOOK OF PHYSICAL DIAGNOSIS FOR THE STUDENT AND PHYSICIAN. By Edward T. Bruen, M.D., Demonstrator of Clinical Medicine University of Pennsylvania. Philadelphia: Presley Blakiston. Toronto: Willing & Williamson.

This is a quarto volumn of 250 pages, devoted to the interesting subject of physical diagnosis. The author has been engaged in teaching diagnosis to private classes of post-graduates and others, and this hand-book merely contains the substance of the instruction given. Among general principles which he lays down in his introductory chapter is one which we have reason to believe is too often overlooked, viz: "that each result of the practice of physical diagnosis is based on the comparative examination of the two sides of the chest in each individual case." Considerable care and attention have been bestowed on the preparation of the work; the author's teaching is clear and concise, and evinces a complete mastery of the subject. The work is illustrated with a few wood-engravings.

CHEMICAL ANALYSIS OF THE URINE. By E. F. Smith, Ph.D., of Muhlenburg College, and John Marshall, M.D., Demonstrator of Chemistry, University of Pennsylvania. Philadelphia: Presley Blakiston. Toronto: Ure & Co.

There are a number of works on Urinary Analysis now on the market, and it would almost appear unnecessary to add another. The authors maintain, however, that none of the works so far issued, deal sufficiently with the chemical side of the subject, and they have endeavoured to supply the deficiency. The basis of this work is "Casselmann's Analysis," to which they have added numerous methods of analysis and suggestions which will enable the investigator to solve many problems met with in the analysis of urine. The work also contains a section upon the microscopic examination of urinary sediments, interesting alike to the student and practitioner.

ON HEMORRHOIDAL DISORDER. By John Gay, F.R.C.S., Senior Surgeon Great Northern Hospital. London: Churchill & Co. 1882.

The above memoir is a revised reprint of articles on this subject which were recently published in the London *Lancet*. The author discusses at some considerable length hepatic disorder in relation to hemorrhoids. In the matter of treatment, after giving the different procedures, such as styp-tics, cauterization, excision, crushing, evulsion, etc., the author states his preference for the ligature over all others.

CATALOGUE OF THE GERMAN GENERAL EXHIBITION IN THE DEPARTMENTS OF PUBLIC HYGIENE AND LIFE SAVING. Berlin: Th. Fischer.

This catalogue of 284 pages contains a complete list of everything which Germany has produced in these departments. The exhibition is to be opened in Berlin in the spring of 1883.

Fourteenth Annual Report of the Inebriates' Home, Fort Hamilton, N. Y., also a statistical report of six hundred cases of alcoholic inebriety, treated at the Inebriates' Home, from November 1st, 1879, to January 1st, 1881, by Lewis D. Mason, M.D., consulting physician.

THE VOICE IN DIAGNOSIS AND PROGNOSIS. By T. Wesley Mills, M.D., L.R.C.P. Lond. Assistant to the Professor of Physiology, McGill College, Montreal. Reprinted from the Canada Medical and Surgical Journal.

BRAITHWAITE'S RETROSPECT OF PRACTICAL MEDICINE AND SURGERY. Part LXXXV.—July. New York: W. A. Townsend, Publisher,

TENTH ANNUAL REPORT ON VITAL STATISTICS, FOR THE STATE OF MICHIGAN. Lansing: W. S. George & Co., Printers.

Births, Marriages and Deaths.

On the 7th ult., at Uniontown, Kas., the wife of Dr. A. L. Fulton, of a son.

On the 10th ult., Alexander Greenlees, M.B., of Toronto, in the 40th year of his age.

On the 28th of July, R. H. Wight, M.D., of St. Johns, Que., aged 69 years.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

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Original Communications.

REPORT OF THE SPECIAL COMMITTEE

APPOINTED "TO SEEK FROM THE DOMINION GOVERNMENT IMPROVED LEGISLATION IN RESPECT TO SANITATION AND VITAL STATISTICS."

Your Committee beg to report that efforts to induce the Dominion Government to comply with the oft repeated request of this Association, to take some action in relation to Public Health and the Vital Statistics of the Dominion, have been continued, and every suitable means adopted to accomplish that result. In the report I had the honour to submit at the last meeting of the Association, I remarked that Sir J. A. Macdonald had expressed himself to a deputation which waited upon him, as strongly in favour of taking decisive steps in the near future to establish a bureau of Vital Statistics and to create a department devoted to Public Health, as soon as the census-taking was completed, if not before. In corroboration of this intention on the part of the Premier, I also read a communication received by Dr. Grant, which I had been requested to read, from Sir Alexander Campbell, to the following effect:—Under date of May 27th, 1881, he wrote: "I have had several communications with Sir John Macdonald on the subject of Vital Statistics, the necessity for obtaining which, you and your colleagues, being a deputation from your profession, have several times brought under his notice. It has been Sir John's wish to give the objects aimed at by you his attention (he cordially concurred in the expediency of their being carried into execution) but the state of his health has been so precarious that he was unable to bring the matter into shape before he left for England. He desired me to communicate with you on the subject in order that you might take the proper occasion to inform your colleagues how

much he regretted his having been obliged to postpone action which he lays great stress upon. I hope that you and your colleagues will bear with the inevitable disappointment attending the postponement of action on your philanthropic suggestions with all the more patience, since I am confident that, had Sir John's health been more certain, he would, ere this, have given practical effect to them." The illness which then prostrated Sir John and caused an enforced absence from his arduous and responsible duties at the capital, was a matter of deep concern, to all Canadians, and to none more than to the members of this Association.

About the beginning of December of last year I addressed to Sir John the following communication:—It is my duty on behalf of the Canada Medical Association to address you again with regard to the matter of Vital Statistics and Sanitary Legislation. At the meeting of the Association at Halifax in September last a committee was appointed "to seek from the Dominion Government improved legislation in respect to Sanitation and Vital Statistics." As chairman of that committee I beg to submit for your consideration that the Canada Medical Association has year after year, for some ten years, passed a resolution asking the Government to take some step with the object of promoting the Public Health, and of preserving lives to the state, similar to what has been done in Great Britain, the United States and other nations, with the most gratifying results.

During last session, as you will doubtless remember, a deputation of senators and members with the committee, waited upon you to express our wishes regarding the question when you not only kindly listened to what we had to say, but expressed your desire and intention to meet, at least to some extent, the views of the medical profession of Canada, as represented by so large and influential a deputation. But unfortunately your severe and protracted illness rendered it impossible for you to do anything toward carrying out your intentions in the matter. We know that it was a cause of regret to you that nothing could be immediately done, from the letter Sir Alexander Campbell wrote at your request, on the eve of your departure for Europe, to Dr. Grant. That letter conveyed to the Canada Medical Association your regrets, your wishes, and your intentions in the future. As Dr. Grant was unable to attend

our meeting, Sir Alexander's letter was transmitted to me to form part of the report I had to present.

I have delayed up to the present addressing you knowing that very much would demand your time and attention after so long an absence from Ottawa. But as the time approaches for the assembling of Parliament it seems necessary to call your attention to the matter. And I do so with the hope that in the present prosperous condition of the Dominion there will be no obstacle in the way of placing in the estimates a suitable sum to make a commencement in the work of collecting and utilizing Vital Statistics, and in educating the public in matters pertaining to Public Health whereby a great saving to the country could be effected in life and producing power, etc. To this communication the following reply was received:—"I have your letter of the seventh inst. on the subject of Vital Statistics and Sanitary Legislation. I shall call the attention of the Minister of Agriculture to this matter without delay and take up the subject.

(Signed,) Yours faithfully,

J. A. MACDONALD.

On the twelfth of January I wrote to each of my colleagues on the Committee that as it was quite out of the question for the Committee to meet and to confer together, I would ask them to kindly furnish me with their views in relation to the matter, that they might form part of a communication I proposed to submit to the Government upon the subject. To this request I was kindly favoured with replies from Drs. Hill and Grant of Ottawa, Hon. Dr. Parker of Halifax, Dr. Botsford of St. John, Dr. Atherton, of Fredericton, Dr. Macdonald, Londonderry, Dr. Fenwick, our President, Dr. Larocque, Health Officer of Montreal, Dr. Orton, M.P., and Dr. Oldright.

On the 21st of January, after consulting with Dr. Oldright, I wrote to the Hon. Mr. Mowat, Premier of the Ontario Government, asking the favour of an interview with the object of explaining certain proposed combined action of the several Provincial Governments with the Dominion Government, and of showing the draft of a bill which the Nova Scotia Government had recommended and which would secure the object aimed at. A prompt and courteous reply invited the Committee to meet him on the following day. Shortly after

this a further communication was made to Sir J. A. Macdonald stating that it was with no ordinary satisfaction his letter had been received, informing me that he would call the attention of the Minister of Agriculture to the matter and take up the subject without delay. I then begged to submit for his consideration the statements communicated to me by the several members of this Committee, of which the following are extracts:—The Hon. Dr. Parker said: "I believe it to be the duty of the General Government to promptly deal with the subject of Public Health and Vital Statistics, but inasmuch as under the British North America Act it will be necessary for the Local Government to legislate in reference to many of the points connected with the subject of Sanitation, there should be consultation and co-operation on the part of those composing the different Governments, ere either the Central or Provincial Legislatures enter upon the matter actually and practically. I understand that your Government of Ontario are likely to legislate on Public Health this session. This is a step in the right direction, but it is not sufficient. The General Government should be urged by the Committee of the Medical Association as well as by the Local Governments to assist the Provinces by money appropriations, and as the subject of "Statistics," is relegated by the B. N. A. Act to the Dominion Legislature, the expense of that very important part of the contemplated system should be borne I think entirely by the Dominion. When Nova Scotia went into Confederation in 1867, we had a pretty well organized Department of Vital Statistics which was carried along for some years by the Dominion Government, but eventually the officers were pensioned and the departments abolished."

Dr. Botsford of St. John's says:—"As to the necessity of our Dominion taking its stand among the civilized powers of the earth, I have long felt it, and if I mistake, not the question of Hygiene will in the North-West be a grand necessity in the respect of proper drainage if nothing else. The question is assuming larger proportions as our country grows, and to have the subject in force now will probably be a large saving in the long run as we know that experience is always costly and if vital statistics in all its ramifications were acted upon at once the cost of experience will be so much the less. I very much fear that it will be

dire necessity only that will compel Government to action."

The following are extracts from the communication of Dr. Larocque:—"My views concerning public health are, that every Province should endeavour to establish a Provincial Board of Health, and also Municipal Boards of Health. We should at the same time aim at a uniform system of vital statistics, with a Central Board at Ottawa. We have provided for that matter in our Provincial Bill. The 11th clause says that the Provincial Board of Health shall consult with the proper officials at Ottawa, in order to have their approbation in the preparation of the various blank forms to be used for statistical purposes in the Province.

If the Provinces of Ontario, Quebec, New Brunswick, and Nova Scotia, would unite in a scheme of this kind, there would not be, I think, any difficulty in getting the Federal Government to allow each of these Provinces a certain sum of money for statistical purposes. If there was an understanding between the four Provinces it could, perhaps, be arranged to have a convention in Montreal as being the most central place. When you have examined our public health bill, be good enough to let me have your opinion on the scheme. I think it is very proper that you should send a communication to the Government. But I fear that no action will be taken unless very great pressure is used."

Dr. Orton, M. P., wrote as follows:—"As I mentioned to you last winter, my idea in reference to what would form the most effective system of collecting vital statistics and establishing a comprehensive system of public hygiene, is briefly as follows, *i. e.*, the appointment in every constituency, or county, or electoral division, of one medical man as a Dominion Health Officer at a nominal salary, say \$50 or \$100 per year, his duty being to collect from clerks of municipalities and the medical men in his district, all the vital statistics as well as suggestions as to the hygienic requirements of the various parts of his district. This to be embodied in a report to be forwarded once, twice, or four times a year, as thought proper, to Ottawa. The co-operation of the several Legislatures is important. The Municipal Act could be so amended as to make it compulsory on assessors to fill up a complete schedule

of vital statistics, which, obtained once a year, would be most valuable. A bureau of vital statistics and public health at Ottawa, with a deputy head at a moderate salary, say, \$3,000 per annum, to make a careful synopsis of reports from Medical or Health Officers, with the aid of a certain number of clerks, say eight, at a cost of, say \$600, some of course more, but others less, making a total cost for clerks of \$5,000 (nity) \$50 a year say, for each health officer in 210 constituencies, (it being more an honorable than a profitable position), total \$10,500. Printing, say, \$15,000, as the report from bureaus should be widely distributed, one at least to the head of each Municipality and Health Officer. The total cost of collecting vital statistics and establishing bureaus, etc., would not exceed \$35,000. This would be ample, and secure much valuable information, and be the means of saving so many, as well as in other ways aiding our country, as to make it the most profitable expenditure in the public interest that could be made. I shall be glad to assist you at any time, or wait with you upon Government, either before or during session, as may be determined best."

Dr. Atherton in reply, wrote: "I suppose we must take the Legislative Acts of other countries and be guided mainly by them. I am myself perfectly willing to entrust the matter entirely to your judgment, and I only hope you may succeed in your endeavors."

Dr. Grant said: "A few weeks ago I saw Sir John Macdonald with Dr. Fenwick, of Montreal, at which time we urged strongly that the subject should be taken into consideration the coming session of Parliament. Sir John made no specific promise, but advised us to secure the various documents of the Health Department at Washington, as a guide for future action. I am now of opinion that you, as chairman of the committee, should forward a strong and vigorous memorial from Toronto, calling on the Dominion Government to take action in the matter of public health; this document to be signed by the profession of Toronto. Forward the paper to Dr. Hill or myself, and we will have it signed here also and placed in the hands of 'The Secretary of State,' without delay."

The most of the foregoing extracts were embodied in the communication to the Premier. I also

stated that "the Medical Society of Nova Scotia, in consultation with the Government of that Province, had given the question the fullest attention, and embodied their views in a bill, a copy of which I have been informed was transmitted to the Dominion Government, and that I thought the provisions of this bill would in the main be acceptable to the profession of Canada. I also stated that, having had an interview with the Hon. Mr. Mowat, and the Provincial Secretary, the Hon. Mr. Hardy, with whom this bill had been discussed, I had reason to believe that the Ontario Government would be willing to adopt some such measure. That the letters from Dr. Larocque showed that the Province of Quebec was fully alive to the pressing requirements of the people as to Sanitation and Vital Statistics.

"The elaborate scheme proposed by Dr. Orton was one which I thought would prove very acceptable and beneficial. I concluded by saying that my communication was somewhat lengthy, but, knowing the strong views held by the medical profession at large, and, imbued with the spirit of the resolution adopted by this Association, I felt it was my obvious duty to lay the matter as fully as possible before the Government, especially as he (Sir John) had already expressed his desire to meet the wishes of the profession in relation to the subject." A reply to this letter informed me that it had been referred to the Department of Agriculture.

The recommendation of Dr. Grant with regard to a memorial was acted upon, and I prepared one, not only for Toronto and Ottawa; but also Hamilton, London and Kingston, with the intention of sending one likewise to other places. Dr. Mullin, of Hamilton, very kindly proffered his aid in procuring signatures to the memorial, or in any other possible way. Mr. William Saunders, of London, promptly and successfully gave me assistance, for which our thanks are due. But Dr. Sullivan, of Kingston, while gladly giving his own name, informed me with regret that he could not procure any more signatures in that city. The following is a copy of the memorial:—

"MEMORIAL OF THE MEDICAL PRACTITIONERS OF THE PROVINCE OF ONTARIO TO SIR J. A. MACDONALD, K.C.B., ETC."

"The undersigned beg leave respectfully to urge upon the attention of the Dominion Govern-

ment the pressing necessity of establishing a Bureau of Vital Statistics at Ottawa to secure proper returns from all parts of the Dominion, and of having a periodical bulletin issued therefrom, conveying information and instruction to the medical profession and general public, with the object of decreasing the rate of mortality, and preventing sickness, and thereby saving lives to the state, and obtaining a greater producing power of the citizens at large, such as has been obtained in other civilized countries."

Only one of these memorials was sent to the Department at Ottawa, that procured by Mr. Saunders, for the reason that it had been learned that the Minister of Finance had placed a sum in the estimates for the purpose of Health Statistics. So far the promise of Sir J. A. Macdonald had been carried out, and we could but wait until the close of the session to see what steps the Government proposed to take. The advent of the general elections doubtless prevented immediate action by the Department of Agriculture. It was, however, hoped and expected that before the present time the purposes of the Government would have been made known. After waiting some time, the following communication was sent to the Hon. Mr. Pope, Minister of Agriculture:—"The approaching meeting of the Canada Medical Association, imposes upon me, as chairman of a special committee, etc., the duty of respectfully soliciting information as to the steps about to be, or already taken by the Government in the matter. I may say that the Committee had intended to wait upon you and the Premier during the last session of Parliament, but, having learned that a certain sum had been placed in the estimates for Health Statistics, it was deemed proper to wait until the scheme of the Government had been made public, especially as the views of the Committee had been previously very fully presented to Sir J. A. Macdonald and yourself. The announcement that the Electoral Districts of the Province had been formed into Health Districts has been received by the Profession with much satisfaction. Any further information which may be furnished by your Department to enable the Committee to present as full a report as possible to the Association will be gratefully received." A reply, dated 31st of July, stated that—"In the temporary absence of the Minister

no reply could at once be given, and that it would be submitted to him on his return." I was also asked to state the date of the meeting of this Association. This information was duly supplied.

From statements made to me by a member of Parliament, I thought it not improbable that your Committee might be called upon to offer an opinion as to the best mode of applying the \$10,000 granted by Parliament for Health Statistics. I consequently wrote to the members of the Committee, asking them to favor me with their opinion as to how the sum could be best expended in beginning the work we have in view, etc. In reply to the enquiry, Dr. Botsford wrote "The amount given for the purpose will not meet the requirements of the case. It would cover Monk's plan of getting statistics, but this would be of partial advantage only, so much would depend on volunteer work. It appears to me that an appropriation by the Government relieves them of the difficult details and throws upon the profession the onus without the power to carry the system into effective operation. At the same time something might be done, provided the Government will ensure the free passage by post of all the circulars and cards required. * * * I am fully persuaded that, to be efficient, it must be compulsory on certain persons or officers to make returns, and that it must be elaborate in detail, and provisions for expenses, and penalties for neglect. I know that it will require a good deal of thought and labor to meet the circumstances of the case. * * We are complicated in our Dominion relationship, and each Province has peculiarities of its own; but some general plan should be devised to cover the whole ground, and until that is done the vital statistics of our country must continue to be mere guess-work, and consequently unreliable. I do not think it advisable for the profession to accept even \$10,000 and undertake the work. It will relieve the Government of responsibility and fail in its results. I believe the matter must be pressed upon the Government until they feel and accept the position, and devise a scheme, etc."

Hon. Dr. Parker writes: "With such an insignificant amount as \$10,000 for the whole Dominion nothing practical can be accomplished. The absence of compulsory registration is a great drawback, and to my mind is essential to success. Pressure will have to be brought to bear upon the

Local Governments on this important matter. The pressure can be made most effective if the Governor-General and his Government could be induced to put themselves in official communication with the local authorities in relation to the matter. If Lord Lorne could be persuaded to take up this matter and make *personal effort* on behalf of the cause, I have little doubt that satisfactory results would follow," etc.

Dr. Macdonald at some length gave his views, and I regret space will not permit of a more extended extract. He says: "The simplest plan would perhaps be to appoint a medical man in each county who would obtain the statistics by circular from clergymen and doctors, and forward these with a report of the sanitary condition of his county to a Commissioner appointed for the Province, who, in his turn would, from the county returns be able to make a report of the sanitary condition of the *Province* to headquarters. The method adopted in England and Wales would be impracticable, first, for want of sufficient funds, and secondly, for want of compulsory registration of births and deaths."

Dr. Fenwick expresses himself in the same terms with respect to registration, and the difficulty of obtaining it, and thinks that the Government should furnish books and forms, and that returns should be made to the Department of Statistics at Ottawa, to be there tabulated and published from time to time.

Dr. Grant, in a valuable communication, remarks, that he is "pleased that even a small grant, \$10,000 for public health has been given, as such will open the way for future action in so important a department as that which guards the lives of the people. * * * The Dominion cannot afford to pass matters pertaining to health, lightly, in this era of progress. * * * It appears to me that for the first year the observations on sanitary matters might be confined to the cities and larger towns, except in any rural epidemic of importance, which from time to time should appear. A medical officer to be appointed for each city and town, and a weekly report to be forwarded to the Department at Ottawa. Such reports to be tabulated and circulated by the Department every two weeks, with general directions of a practical character arising out of the acquired information collected at the different points. Facts

and suggestions thus thrown out, will in time prove the basis of a more extended system of investigation as to the causes of disease and the arrest of the same, such as now adopted in Great Britain and the United States.

Dr. Oldright has replied, saying: "I consider the scheme which I think you said was originally proposed by Dr. Orton a good one." He then proceeds to say, "that the Board of Health for Ontario, of which he is chairman, is meeting with hearty response to requests for co-operation by correspondents, and the members of the profession are cheerfully volunteering to advance scientific investigation. I need hardly say that I shall be glad to co-operate heartily with you in such labors. I think that the subject of immigrant inspection ought to be attended to in the report."

In the early part of the summer I had the opportunity of discussing this question with Dr. Orton who was about to visit Ottawa. The result of our conversation was the united belief that in view of the limited sum set apart for the purpose the scheme which he, Dr. Orton, had proposed and presented to the Minister of Agriculture some two years previously, and which has been already given in this report, should be so modified as to meet the available sum, namely: The Provinces to be divided into districts on the basis of the electoral districts for the Dominion; an officer to be appointed for each. At first he should receive only a small sum until the utility of the work would so impress the Government and people that an adequate sum would be granted to permit of further remuneration. The reports of the several officers of the health districts to be sent direct to the Department at Ottawa to be dealt with by a competent chief officer aided by a secretary. The Department to issue a bulletin once a fortnight containing such information in a summarized form, as the reports furnished, with instructions and advice to the public suitable to the present sanitary state of the country. As it might be supposed that all correspondence and papers passing through the post would be free, it was thought that even with \$10,000 an important step could be taken in state medicine. Dr. Orton made it his business to give this scheme to Sir J. A. Macdonald while in Ottawa. The announcement in the *Canada Gazette* that the provinces of Ontario, Quebec, Nova Scotia, and New Brunswick had been divided into Health Districts, gives promise that very shortly this plan, or one not unlike it, will be adopted by the Department.

In conclusion allow me to give you an extract from a letter by the "President of Sanitary Con-

gresses," "late chief officer of the General Board of Health of Great Britain," which appears in a late issue of the United States *National Board of Health Bulletin*. He writes: "You will, I am sure, be pleased to be informed, from recent reports and statistical returns, that by rudimentary and yet very imperfect applications of sanitary principles, there has been effected in England and Wales during the last decade a saving of a quarter of a million lives, and of more than three million cases of sickness, and upwards of four millions of money; and I may add that within the same last decade, by somewhat advanced applications of sanitary science, there has been in the Indian army, in the Colonial army, and in the home army, a saving of nearly fifty thousand of men effected, and nearly nine millions of money saved from expensive sickness and death rates." He also states that, "on good authority, the death of the late Dean Stanley from erysipelas was occasioned" by sewer gas arising from bad drainage."

It will thus be seen that the authorities may, with economy, expend money in preserving the health and lives of the people. Would it not be much better to pay money in saving the lives of Canadians than in promoting immigration?

It is a matter of satisfaction that the Ontario Parliament has passed a Health Act; also that a comprehensive one is passed by the Quebec Legislature. But to make any system of public health fully useful for the whole of Canada, there requires a Dominion Board to act in connection with the Provincial Boards. It is to be hoped that the promise to create a Health Bureau at Ottawa will soon be carried out, and it is respectfully suggested that the Department of Agriculture would find the work of elaborating a system of Health Statistics much easier would they appoint a medical man, representing the Association, to give advice and help to develop a scheme suitable for the country within the limits of the amount at present devoted to the purpose.

Respectfully submitted,

WM. CANNIFF,

Chairman.

1st Sept., 1882.

CASES IN PRACTICE.*

BY R. A. ALEXANDER, M.D., GRIMSBY, ONT.

VENESECTION—FOR CONVULSIONS OCCURRING DURING SCARLATINAL DROPSY.

On the 21st September, 1879, C. P.—, a boy eight years old, was attacked by scarlet fever which ran a severe course, and was followed in the first week of January, 1880, by general dropsy. Hydrogogue purgatives, vapor and hot air baths were

*Read before the Ontario Medical Association, June, 1882.

used. Urine diminished to one or two ounces in twenty-four hours. Had twitching in arms and legs. Leeches over kidneys, with subsequent application of cupping glasses, followed by warm poultices, did not relieve symptoms. Bled from arm to amount of four to six ounces. Rapid recovery from symptoms of convulsions, and urine secreted freely. A certain amount of ascites and albuminous urine continued for six months. He at the present date enjoys very good health.

II. A girl, twelve years of age, had a moderately severe attack of scarlet fever in December last. Two weeks after disappearance of rash, face and body began to swell. Urine scanty and smoky. Prescribed infus. digitalis. At end of four days patient much worse. Violent headache and unable to retain either food or medicine. Was given vapor baths and purgatives. Had a violent convulsion lasting half an hour, at the end of which she remained quite unconscious. In less than an hour, another convulsion came on, and when I first saw her had lasted for an hour. Her face was livid, pupils contracted to a small point, frothing at mouth. Bled her from the arm to amount of eight ounces. The convulsions passed off. Was able to swallow a dose of chloral and potassium bromide. Slept four hours. Awoke quite sensible. Made a rapid recovery.

RÖTHELN OR GERMAN MEASLES.

In February, 1881, W—— F——, aged about 35, after feeling slightly indisposed for a day or two, became covered with an eruption somewhat resembling measles, but without the peculiar odour of that disease. He remembered having had measles some years before. Conjunctivæ intensely congested; throat red and sore, but not swollen; temperature 101°; did not feel sick; would not remain in the house; went about his work the next day with the rash fully out; had no complications nor sequelæ.

This was the first case of an epidemic of Rôtheln or German measles, which prevailed in this section during the following spring and summer. On the 15th of the same month I vaccinated a boy aged three years with non-humanized vaccine virus from an ivory point. On the 24th, at the height of the vaccinia, he had a convulsion and the same day his face and body became quickly and thickly covered with an elevated eruption somewhat like measles. The eruption consisted of elevated spots or patches, some round, some irregularly shaped, of a bright red colour. The colour, however, varies a great deal in different patients. The day after the convulsion he was able to be up and about the house, and apparently did not feel very sick. The disappearance of the rash was very gradual and it could be seen at the end of two weeks, whenever he became overheated from any cause. There was violent inflammation of an erysipelatous character

in the vaccinated arm, with intense induration around the pustules, in fact almost gangrene.

After these two cases the disease spread rapidly through the village, and we were not free from it until the ensuing autumn. This epidemic was marked by symptoms common to both measles and scarlet fever. The premonitory fever was short and seldom as high as 102° Fah., and was relieved by the coming out of the eruption. Neither measles nor scarlet fever was prevalent at the time. Many of the children whom I attended during this eruptive fever I had previously attended for measles and since for scarlet fever.

My reason for drawing attention to this epidemic is the fact, that in several instances facial erysipelas occurred as a *sequel* within a week after the disappearance of the rash. In five cases of young ladies between the ages of fourteen and thirty years, who, after the disappearance of the eruption and feeling very well and the weather being unusually fine, had gone out walking or driving, erysipelas of the face appeared immediately and was of a severe type. One young lady died suddenly on the eighth day. In every case the sequel occurred at the beginning of a menstrual period. Tinctura ferri mnr. was badly tolerated in the erysipelas. Quinine acted well.

TRACHELORRHAPHY.

BY T. K. HOLMES, M.D., CHATHAM, ONT.

Emmet's operation for the cure of laceration of the cervix uteri is on its trial before the medical profession at present, and it is desirable that its utility be correctly estimated. In the hope of eliciting a discussion of the subject I present this paper, and by omitting as far as possible all points discussed in gynecological works and which are either familiar to or within reach of every one, I hope to limit it to a very few pages. In my experience laceration is found in forty per cent. of all uterine affections and is seldom uncomplicated, usually co-existing with areolar hyperplasia, subinvolution, endo-cervicitis or some form of displacement.

The predisposing causes are:—1st. Rigidity of cervix. 2nd. An unhealthy state of cervical tissue. 3rd. Abnormal presentations. 4th. Disproportionate size of foetal head.

The proximate causes are:—1st. Violence of uterine contractions. 2nd. Maternal efforts at expulsion when the head is about to escape from the os. 3rd. Artificial delivery unskilfully performed.

The operation of the first-named exciting cause is often due to the injudicious administration of oxytocics, more particularly ergot. There are doubtless other causes but these are the chief ones. Lacerations may be divided into those that heal spontaneously and those that do not, and the latter

(Read before the Ontario Medical Association, June 1882.)

into those that can be cured by topical applications and those that can only be cured by trachelorrhaphy. Slight lacerations of recent origin get well quickly under the use of the hot douche, medicated tampons, local depletion, and stimulating applications of iodine, carbolic acid, etc. Nitrate of silver, if used at all, must be applied with the utmost caution as it is otherwise sure to produce contraction which may result in stenosis.

The gravity of the symptoms does not bear a direct relation to the extent of the laceration, but depends upon the condition of the whole organ, and of the pathological state of the torn parts. Subinvolution, metritis, follicular enlargement, and displacements augmenting the suffering while without any of these the sensitive state of the torn cervix is alone sufficient to greatly impair the health and render medicinal treatment useless. Having had his attention directed to the uterus as the organ diseased in a given case, and having on examination found a laceration, how is the physician to determine as to the advisability or necessity of an operation? This is an important question and requires considerable experience to answer it correctly. If the cervical tissue is soft and the laceration small with little or no eversion of the lips, and there is reason to believe the injury to be of recent origin, the case is one offering a good prospect of perfect cure by topical applications. On the other hand, if the laceration be extensive, the eversion marked or the tissue hard and of a cicatricial character an operation is imperative, because even if we succeed in accomplishing a healing of the raw granular-looking surface by other means, the eversion will not be cured and the hard, whitish cicatricial cervix will remain and give rise to symptoms of malnutrition and nervous disturbance almost or quite as serious as obtained before. Laceration generally permits eversion of the lips, and when it does, an accurate idea of its extent may be obtained by hooking a tenaculum into each of the everted lips, and drawing them together. When this is done the raw surface diminishes as the inversion is accomplished until it nearly or wholly disappears. Sometimes little or no eversion exists until upward pressure on the vaginal walls at the cervical attachment pulls the torn lips apart and discloses the characteristic raw surface. This can be accomplished by using a large Ferguson's speculum and pushing it well up so as to make the desired upward pressure on the vaginal walls. The same may be done by using a Sim's speculum. The various kinds of laceration are so fully described in works on the subject as to obviate the necessity of speaking of that part of the subject here.

Immediate operation, or that at the time of the injury I have not performed. Dr. Mundé, editor of the *American Journal of Obstetrics*, strongly recommends it, and judging from his results it is worthy of consideration and if union be secured

would doubtless lessen the chances of septicæmia, just as immediate closure of lacerated perineum does. If not sewed up immediately it is necessary for involution to be completed before operating. Pelvic cellulitis, or indeed acute inflammation of any of the pelvic organs, contra-indicates an operation and should be overcome before attempting one. In all cases operated on by me I have resorted to a preparatory treatment consisting of the hot douche, tampons saturated with glycerine and tannin, local depletion, and in cases complicated with displacement daily repositions by postural method, aided by gentle pressure per vaginam and maintained by small medicated dossils of cotton batting. The use of the hot douche immediately before operating renders hæmorrhage less troublesome. I have found the following the most convenient and satisfactory method of operating. The patient properly etherized is placed on a table of convenient height in the lithotomy position and before a clear but not dazzling light. One assistant administers ether while two others support the knees and feet keeping the thighs well flexed. One of these assistants also holds a Sim's speculum under the pubic arch, while the other, if necessary, uses the sponge.

The instruments required are a small vulsellum forceps, a long bistoury, scissors curved on the flat, sponge holders, needle forceps, wire twisting forceps, shield for limiting the twisting of the wires, two Emmet's needles threaded with silk and half-a-dozen No. 28 best silver sutures, sixteen inches long. Having with the left hand seized the posterior lip of the cervix with the vulsellum forceps so as to have the upper jaw occupy the part that is to form the restored cervical canal the operator steadies the uterus and with a long bistoury divides the tissue on each side of the upper jaw of the forceps, first on the posterior lip then on corresponding parts of the anterior lip leaving a strip nearly half an inch wide in the centre where the forceps hold untouched and which are being brought into apposition from the continuation of the cervical canal. The removal of the tissue can be performed with great facility with the bistoury and in much less time than can be done with scissors, besides the internal boundary of the denuded surface can be more easily and accurately made with the knife. Care must be taken to remove all cicatricial tissue. After bleeding has been stopped the wires are to be passed in the manner described by Emmet; the wires twisted and sheathed in a piece of rubber drainage tubing. Absolute rest in bed is necessary in some but not in all cases, the condition of the patient being the criterion. Union is often perfect in seven days, but as no harm results from the presence of the silver sutures they may be left in ten or twelve days if union be not complete before that time.

The following table gives a short statement of nine cases upon which I have operated:

THE CANADA LANCET.

No. of Case.	Name.	Age.	No. of Labors.	Duration of Laceration.	Form of Laceration.	COMPLICATIONS.	LEADING SYMPTOMS.	Date of Operation.	RESULTS.
I.	Mrs. R. J.	25	2 One Abortion.	4 years.	Stellate.	Areolar Hyperplasia.	Anæmia, Dyspepsia. Great Debility. Leucorrhœa.	January 27, 1880.	Good health.
II.	Mrs. I. T.	34	5 Two Abortions.	6 years.	Transverse.	None.	Menorrhagia. Excessive Anæmia.	January 28, 1880.	Steadily improved, and became pregnant in six months after operation. Was delivered at full term, and is now perfectly well.
III.	Mrs. A. K.	26	1	2 years.	Stellate. 3 Fissures.	None.	Debility. Leucorrhœa.	February 16, 1880.	Has remained well to date.
IV.	Mrs. M. R.	34	4 Three Abortions.	5 years.	Lateral.	Retroflexion.	Constipation. Inability to walk or work. Pain in lumbar region.	February 17, 1880.	Became pregnant, and was delivered without injury to cervix. Wears a retroversion pessary, and is much better.
V.	Mrs. J. S.	31	4 One Abortion.	4 years.	Lateral.	None.	Menorrhagia Anæmia. Pain in lumbar region. Inability to walk far or do any work.	June 29, 1880.	Has recently been confined. Don't know results.
VI.	Mrs. J. F.	38	3	3 years.	Stellate.	Subinvolution. Prolapsus uteri. Cystocele. Lacerated perineum	Anæmia. Difficulty in walking. Debility.	November 25, 1880.	Able to perform domestic duties pretty well. Not perfect recovery, but greatly improved.
VII.	Mrs. J. K.	33	4	5 years.	Lateral.	Retroversion.	Inability to work or walk. Hysteria.	December 15, 1881.	Is wearing a retroversion pessary. Not improving very fast. Is very hysterical.
VIII.	Mrs. J. A.	35	2	1½ years.	Lateral.	Retroflexion.	Inability to walk or stand longer than ten minutes. Anæmia. Dyspepsia. Debility.	May 1, 1882.	Two weeks after operation walked two miles without fatigue. Is greatly improved.
IX.	Miss B. S.	25	2	3 years.	Lateral.	None.	Great weakness and peculiar bronzed skin.	May 22, 1882.	Union perfect. Too soon to judge of permanent results.

Correspondence.

DISPOSAL OF SEWAGE.

To the Editor of the CANADA LANCET.

Sir,—In your last issue I notice an article on "Sewerage and Disposal of Sewage," which reminds me of an idea I saw carried out in Haddington, in East Lothian, Scotland, when I was there in 1869. How it has turned out as a commercial venture I do not know, but if you should desire any of the details Messrs. David and James Croal, Proprietors of the Haddingtonshire Courier, could, doubtless, from their files give you all information.

Haddingtonshire or East Lothian is, we may say, the garden of Scotland, and is cultivated to the highest degree of perfection, vast quantities of artificial manures, guano, etc., being used in addition to that produced on the farm, and so far as I remember I think leases forbade the sale of any straw. This being the case, and as the river Tyne (a small stream) was being polluted by the sewage from the town, led to the idea of building a large tank and having the sewers run into it, the supernatant fluid being carried away for top dressing, and the sediment being ploughed into the soil. In the event of a spurt it was then only that the overflow of the tank entered the river, and as a consequence it also would be swollen, and any deleterious matter was carried off with the current. One great mistake was made by sinking the tank close to the river and considerably below the level of its bed so that at first it filled up to the level of the surface water; that, however, I think was remedied.

In such a vast agricultural country as there is surrounding Toronto, would it be possible to build tanks in various situations where the fall is favourable, made after the principle of the lower tank of a gasometer, leading the sewage into these, and shipping the fluid portion to farmers for top dressing during the mild months, and unless the tank becomes overfilled take advantage of winter to remove the frozen sediment when it would cause no nuisance to residents nor risk to those employed in the work?

The practicability of the scheme is a question for engineers, and the question if the demand by farmers would prove remunerative is one for the

financier, but if such a vast quantity of manure could be utilized for the good of the farmer, and at his expense, and at the same time the desired end secured of keeping the bay pure, the suggestion might lead to a discussion whereby both ends might be achieved.

Your obedient servant,

JAMES SKIRVING.

TAVISTOCK, Sept. 16th, 1882.

APOMORPHIA AS AN EMETIC.

To the Editor of THE CANADA LANCET.

Sir,—As some of your readers may not be fully acquainted with the value of apomorphia as a safe and rapid emetic, I send you my experience in two cases. A man came to my office having swallowed his plate of false teeth, measuring $2\frac{1}{2}$ by $1\frac{1}{4}$ inches. It still remained in the œsophagus, but out of reach or sight, gradually working down in spite of the man's efforts to prevent it. I immediately injected hypodermically into the arm $\frac{1}{8}$ gr. of apomorphia which produced free emesis in six minutes, and also the removal of the plate.

I was called to a case of poisoning by morphine and although the woman was rapidly becoming insensible she would give no information about the size of the dose, and declined to take any antidote. I injected hypodermically $\frac{1}{8}$ of a grain of apomorphia which produced free emesis in eight minutes and the case gave little more trouble.

These cases may call the attention of the profession to a medicine which I believe is still but little used.

Yours truly

W. GEDDES STARK.

HAMILTON, Sep. 1st., 1882.

Reports of Societies.

CANADA MEDICAL ASSOCIATION.

The fifteenth annual meeting of the Canada Medical Association was held in Toronto on the 6th, 7th and 8th of September, under the presidency of Dr. G. E. Fenwick, Montreal.

Drs. D. H. Goodwille and Elsburg, of New York, Drs. Brodie and H. O. Walker, of Detroit, and Dr. Workman, of Toronto, ex-President, were invited to seats near the platform. Dr. Osler, of Montreal, Secretary of the Association, read the minutes of the last meeting, which were adopted.

On motion of Drs. Wright and Canniff, Dr. W. B. Carpenter, of London, England, the eminent physiologist, was elected an honorary member, and it was announced that he would address the meeting upon the subject of "Vital Statistics."

Dr. Fulton, the chairman of the Committee on Necrology, read a list of members of the profession who had gone to their last resting place since the previous meeting of the Association.

Dr. Graham, Toronto, read the report on the Practice of Medicine. He referred to the International Congress held last year, and to the publication of discoveries made by Koch, of Berlin, regarding tuberculosis, a disease which he attributed to the presence of bacteria. By inoculation with the bacilli of tubercle the disease was produced, and there was no doubt that the germs were a cause of the disease. He was of opinion that many cases were set down as typhoid fever which were really cases of tuberculosis. In adults the disease generally commenced in the lungs, the germs being inhaled by the breath. In children the germs seemed to enter the stomach with the food, and the disease was generally found to originate in the bowels.

Dr. Carpenter now entered the room and was greeted with applause. He was introduced to the meeting by Dr. Canniff. The president also informed him that he had been elected an honorary member, for which he thanked the Association. He then proceeded to speak on the subject of "Vital Statistics." He emphasized the advantages of a strictly uniform system of taking statistics, such as prevailed in Great Britain. In the tabulation of these statistics a most important part was taken by Dr. Farr, the most able assistant-registrar, and it might perhaps be in the knowledge of many of them that to Dr. Farr they owed a word which had had a most important effect on the public mind, as conveying a distinct conception of a class of diseases which physicians now isolated from all others, namely, the word "zymotic." But it was a very curious thing that in Sir John Pringle's work on "Diseases of the Army," which was about 140 years old, the same idea was most distinctly enunciated—namely, that disease germs of certain classes of disease introduced themselves into the blood, and produced a fermentation of the blood, which was the cause of a particular type of disease. Sir John Pringle gave further the

results of some observations which the speaker had always held to be of fundamental value, namely, the principle of the convertibility of certain forms of zymotic disease to other forms—diseases which they were accustomed to regard as of a different type. At the conclusion of the rebellion of 1745, in Scotland, the troops were shipped off in little brigs. Some of the men were suffering under the mild autumnal fever. The brigs knocked about for six weeks, during which the men were enclosed under hatches without ventilation. In consequence of the unsanitary conditions the fever changed by the process above referred to into a malignant typhus. They landed, and the disease spread among the villages in which the men located. Another instance had come under his observation of the malarious fever of the west coast of Africa, changing under similar conditions into yellow fever of a contagious character. Dr. McWilliam and others had reported similar cases of the same convertibility of these kinds of fever. He also referred to Sir Robert Christison's opinion in favor of the convertibility of zymotic diseases, and that typhus and typhoid could not always be distinguished, and said that Sydenham, one of the best observers, did not distinguish between scarlatina and measles. He also quoted Pasteur's opinion to the effect that the medium in which the germs were developed would have a most important effect on the germs themselves; that when germs which would produce ordinary malarious fever developed themselves in blood which was rendered unhealthy by bad ventilation or other causes, these germs would develop themselves in quite a different form, producing a different type of disease. A fact of great importance which the vital statistics of Dr. Farr brought out was, that the prevalence of non zymotic diseases was a tolerably uniform quantity all over the country, and that the occasional doubling or trebling of the death rate in certain localities was due solely to zymotic diseases. When their sanitary reformers got hold of this fact they were able to press the point upon the attention of the Government; but the great obstacle which they had to encounter, and which no doubt had to be encountered in Canada, was the want of public opinion. The speaker then referred to the subject of small-pox, in which he said he had always taken a deep interest. The small-pox epidemic which swept over

Europe and America in 1871, was of a most singular character, and called attention to a type of small-pox which had not been epidemic since the beginning of the last century. He believed that the revival of the severe form in 1871 was due to the crowding together of the French army in Paris, and of the French prisoners taken by the Germans, and that the malignant type was thus developed out of the milder form. The lesson they had to learn from all this was to insist upon vaccination. Good vaccination might be said to be an almost perfect preventive. Another fact which the older practitioners recognized was, that the quality of the vaccination had deteriorated during late years, and the only remedy for this was to obtain the vaccine fresh from the animal.

A vote of thanks was conveyed to Dr. Carpenter for his interesting address.

The following gentlemen were appointed a Nominating Committee:—Drs. McDonald, of Hamilton; Kennedy, of Toronto; Sweetland, of Ottawa; Rodger, of Montreal; Cameron, of Montreal; Robillard, of Montreal; Botsford, of St. John; H. P. Wright, of Ottawa; Harrison, of Selkirk; I. H. Cameron, of Toronto; Scott, of Montreal, and Sloane, of Blyth.

The meeting then adjourned to meet again at 5 p. m., for the purpose of organizing the Sections on Medicine and Surgery.

In the evening session the President read his address. After thanking the members for electing him to the office, he referred to the benefits received from the meetings of the Association. The programme before them was a wide one. It was an important matter to meet together and compare notes on matters relating to their profession. It was to be desired that the discussions should be thorough, and with this view it had been arranged that the Association should meet in sections. It was necessary that they should come to these meetings with minds open to conviction, as otherwise discussions would be useless. He referred to the influence which the British Medical Association possessed in the councils of the nation, and said they might look to that Association for an example of what the Canadian Association might be, and the important work within its scope. A great deal of the work of that Association was done by its branches, and he hoped to see the same plan adopted in Canada. He then traced

the history of the Medical Association, and gave it as his opinion that they might have been celebrating their jubilee, as the British Association was now doing, had it not been for the disagreement which at one time marked the proceedings of the Association and interrupted its existence. On taking up the subject of public health he quoted Lord Beaconsfield's reported remark that the first business of a Minister should be the health of the people, and he hoped similar words would be used by some Minister at Ottawa. They were so far without any system, but the Government was desirous of receiving suggestions, and had placed \$10,000 at the disposal of the Minister of Agriculture. He thought that the collection of the statistics should be governed by municipal regulations. At present it might be well to limit the collection to towns and cities where some provision was already made, as, for instance, boards of health or health officers. He would recommend that the committee appointed at the last meeting to confer with the Government on the subject be continued. (Applause.)

Dr. Field, of Barbadoes, and Dr. Lough, of Bermuda, were elected members by invitation.

MEDICAL SECTION.

This section met at 5 p. m., and elected Dr. McDonald, of Hamilton, Chairman, and Dr. Stewart, of Brucefield, Secretary.

Dr. Osler, of Montreal, read a paper on "Echinococcus disease in America." The introduction into the human system of the ova of the *tænia echinococcus* of the dog undoubtedly produced a disease of the most serious character. Cases occurred in Europe, Iceland and America. All the internal organs became disordered, and echinococcus cysts developed. These cysts were found in the liver, spleen and lungs. Altogether only nine cases had occurred to his knowledge in Canada, and he had collected 61 altogether on the Continent. The ingestion into the system of one of the ova of the *tænia echinococcus* would not be followed by the same results as would follow from the ingestion of the larvæ of *tænia solium* from uncooked or imperfectly cooked measly pork. The ovum of the *tænia echinococcus* developed into a cyst in the liver, which produced a number of hydatids. The ovum of the *tænia solium* of measly pork invariably developed into tape

worm. *Tænia echinococcus* were ingested into the human system in water contaminated by dogs.

Drs. Graham and Temple related cases of the disease which had come under their observation.

Dr. Osler said that the treatment adopted in Iceland and Australia was either tapping or incision, while some cases had been cured by spontaneous rupture.

At the evening session Dr. Macdonald, chairman of the section, delivered a brief address, and reviewed the work already done by the Association.

Dr. Cameron, of Montreal, read a paper on the subject of "Axis Traction," in which he showed the advantages and disadvantages of the straight forceps, the curved forceps, and Tarnier's curved forceps. The advantage of the straight forceps was that it did not interfere with the natural rotation of the head, but a great disadvantage was, that when the head was high up the instrument could not fail to come in contact with the coccyx. There was also the liability to slip and injure the perineum and soft parts. The curved forceps were less liable to slip, but the line of traction was not in the axis of the pelvis, and if the instrument was so adjusted as to bring the line of traction right, it would be sure to come in contact either with the symphysis pubis or coccyx. To combine the advantages of these two kinds of instruments and eliminate their disadvantages, Tarnier had invented his forceps which had the advantage of traction along the pelvic axis and at the same time permitting the natural rotation of the head. The objections urged against Tarnier's instrument was its clumsiness and cost, and the danger of injuring the internal cavity.

Dr. Holmes, of Chatham, said that he had been accustomed to use the forceps after the manner recommended by Dr. Albert Smith, of Philadelphia, both as a lever and tractor, directing the woman to avoid pressure and thereby avoid laceration.

Dr. Temple, of Toronto, thought Tarnier's forceps were complicated, and that much simpler ones were better.

Dr. Stewart, of Brucefield, thought that danger was to be apprehended from the excessive use of instruments.

Dr. Alloway, of Montreal, read a paper on "Abortions," which he did not think had been

properly handled in some of the leading treatises, such as Leishman's. The great danger arose from hemorrhage by dilatation of the os uteri. He alluded to the modes of treatment recommended by different authorities, and the difficulty of carrying out some of them. His own experience was in favor of the uterine scoop. He condemned the use of the placental forceps. He related a number of cases in which the uterine scoop had been successfully used, and described the manner of placing the patient and using the instrument.

Dr. Tye, of Chatham, said he really thought we were passing through the iron age in the matter of obstetrics. After seeing all the forceps and scoops, and other iron instruments, he really congratulated himself that he was not a woman. In his practice he relied chiefly on the instruments provided by nature, and he found them very suitable.

Dr. Campbell, of Seaforth, said he had heard Dr. Spence, of Edinburgh, who must be regarded as a high authority, express himself decidedly in favor of Tarnier's instrument.

Dr. Rodger, of Montreal, while he disapproved of undue multiplicity and complication of instruments, said the valuable assistance rendered by them could not be overlooked. He spoke in favor of the tampon and placental forceps in abortion. After their use, and twenty-four hours' plugging of the os, matters were found in a satisfactory condition.

The section then adjourned.

SURGICAL SECTION.

The surgical section met in the afternoon, and elected Dr. Grant, of Ottawa, chairman, and Dr. Ross, Jr., Toronto, secretary. Dr. Grant returned thanks, after which the section adjourned until the evening.

On resuming, Dr. Roddick, of Montreal, exhibited a patient who had suffered for many months from a painful spasmodic contraction of the muscles of one side of the neck. The man was obliged to hold his head between his hands constantly. Dr. Roddick divided the muscles, but with only temporary effect. He then applied the actual cautery frequently to the back of the neck, and the result has been most satisfactory, as the man is now perfectly well.

Dr. Major, of Montreal, read a paper on "Rest

and Tracheotomy in Laryngeal Affections." He advocated the importance of rest in all cases of disease of the larynx and throat, condemned the use of gargles, and gave reasons sufficiently conclusive. The diagnostic value in malignant disease of the presence of indurated glands under the anterior border of the middle third of the sterno-mastoid muscle was also alluded to. The indurated glands exist before ulceration takes place in the morbid growth. His experience extended over seven cases; in all, this condition was noticed, and on the same side as the malignant development. He had not found it in syphilitic, chancroid or other diseased states. He also recommended gold instead of silver canulas, as gold opposed the action of the secretions much better than silver, and was less irritating. He advocated rest in hysterical conditions, especially when any vitiated method of phonation or respiration had been acquired, and said that attempted phonation on inspiration was one at least of the causes of hysterical aphonia or dysphonia.

Dr. Ryerson, of Toronto, agreed with Dr. Major in his views, as also did Dr. Fenwick, more especially in relation to cancerous diseases, as it merely substantiated his experience of colotomy for cancerous disease of the rectum.

Dr. Elsberg, of New York, endorsed the views expressed by Dr. Major, and said that he deserved the thanks of the Association, for denouncing the old-time method of gargling. He had some years ago, his attention drawn to the fact that rest in cases of inflammation, applied to the throat as well as to any other part of the body. Under the influence of rest inflammatory conditions subsided. The larynx was moved in three functions, namely, in the production of voice, in breathing and in swallowing. The first was a voluntary action, and it was possible, therefore, to secure complete rest. Breathing, though absolutely necessary for life, might be made easier, and by tracheotomy the larynx might be relieved from active participation in respiration. Was it advisable to preform tracheotomy for this purpose? He did not share in the opinion that it was a simple or harmless operation, but he considered it was valuable in appropriate cases. With regard to the third function, swallowing, tracheotomy did not afford complete rest, but other means might be taken to give partial rest.

Dr. Hingston asked Dr. Elsberg and Dr. Major

to state in what cases they would or would not use tracheotomy? He also dissented from the view that tracheotomy could either retard or have any curative effect on malignant disease.

Dr. Elsberg said he would use it in all cases in which stenosis indicated it. With regard to the second point, he had not enunciated the opinion that it could cure but it might arrest for a time the progress of malignant disease.

Dr. Sutherland, of Montreal, exhibited fourteen specimens illustrating the terminations of aneurism, all of which were exceedingly interesting. Three of them showed nature's method of cure.

Dr. Sheppard, of Montreal, read an interesting paper on "Cervical Ribs," which occasioned some discussion.

Dr. Grant, chairman of the section, read a paper on "Cancer of the breast in its relation to Disease of the Nipples," which was listened to with great interest, and was discussed by Dr. Hingston, Dr. Fenwick, Dr. Ross, jr., and others.

The section then adjourned.

SECOND DAY'S PROCEEDINGS.

The general meeting was called to order by the president at 10 o'clock.

Dr. Shepherd, of Montreal, read the report of the Committee on Surgery. He first referred to the great advances made in the treatment of wounds, and said all surgeons were not antiseptic surgeons, and that Listerism was only a phase of antisepticism. He advocated the dry form of dressing wounds, and gave his own method of dressing wounds, with iodoform and boracic cotton. The theories as to the cause of inflammation were then touched upon, and an account given of Dr. Hamilton's experiments with sponge-grafting. He also alluded to the wonderful success of Dr. McEwen and Mr. McNamara in bone-grafting. He then remarked that no organ was considered sacred by the surgeon, and spoke of the wonderful success that had attended the operations of nephrotomy and nephrectomy. The treatment of club-foot was glanced at, and the opinion of the members asked as to the advisability of tenotomy. The report concluded with an account of the late improvements in the treatment of the joints, and the question of excising joints for joint disease discussed.

Dr. Grant, of Ottawa, referred to the valuable services of M. Pasteur in the field of surgery, and emphasized the importance of antisepticism in the treatment of disease.

Dr. Roddick, of Montreal, while expressing great admiration for Dr. Shepherd's report, disagreed with him as to the value of dry dressing. He also spoke strongly in favor of the antiseptic treatment.

Dr. Hingston, of Montreal, after complimenting Dr. Shepherd on his admirable report, said that antisepticism and Listerism were not convertible terms. There was no surgeon who was not in favor of antisepticism, by which he understood complete cleanliness in treating wounds. With regard to the treatment of club-foot, he was not in favor of the division of the *tendo-Achillis* at an early stage of the disease. In his mind the tendon was not at fault in a majority of cases, and should be the last to be divided.

Dr. Mackay, of Woodstock, had sometimes treated club-foot without dividing any tendons.

Dr. Sloane, of Blythe, spoke of the improvements made within the last few years in the treatment of wounds.

Dr. Workman wished to know whether any member present had any experience in dressing wounds with whiskey.

Dr. Ferguson, of Toronto, and Dr. Stewart, of Brucefield, also discussed the paper.

Dr. Harrison, of Selkirk, did not understand the separation of antisepticism from Listerism. He remarked that he was thankful that in the country places they had never discovered anything—(laughter)—as he found that discoveries very often underwent a course of indiscriminate praise, and afterwards undeserved abuse.

Dr. Canniff did not think the whole credit was due to Dr. Lister. M. Pasteur and Dr. Samson Gamgee, of Birmingham, had also rendered service of the highest order.

Dr. Campbell, of Seaforth, would like to have a definition of what Listerism really was, and asked the president to define it.

The president said that would be a very arduous task for him. His own practice was to cleanse wounds and then apply the spray. He considered the use of the spray advantageous, and meant to continue the use of it till something better was in-

troduced. Even with the use of antiseptics he had not found it possible to prevent suppuration. He was not convinced Dr. Gamgee's method of dry dressing was in any way superior to the moist.

Dr. Brodie said he had used very little carbolic acid in his practice, and did not know but he had been as successful as his brethren who had made use of it. One fact which he thought was a good deal lost sight of was the management of the patient before the operation.

Dr. Tye, of Thamesville, then read the report of the Committee on Therapeutics. He referred to the dangers resulting from hasty generalizations in therapeutics as well as in surgery. The power of medicines was merely to increase or diminish the functions of tissues and organs; they could not change the character of these functions. He dwelt on the use of electricity in cases of anæsthesia, asthenia, and suppressed menstruation, and also characterized the effects of different kinds of currents, such as the magneto-electric, the galvanic, and the frictional, when applied in the treatment of different kinds of disease. The therapeutic effect of certain newly-introduced drugs, such as nitro-glycerine, pilocarpin, salicylic acid, antiseptic inhalations, etc., was also referred to.

Dr. Canniff laid before the association a printed report of the committee appointed to seek from the Dominion Government improved legislation in respect to sanitation and vital statistics. (This report will be found in another column.)

The association then adjourned.

MEDICAL SECTION.

Dr. Harrison, of Selkirk, read a paper on "A Peculiar Form of Fever" which had come under his observation. He described the symptoms, progress and treatment adopted in these cases. Sometimes the fever was remittent, subsiding occasionally for a few days, and then recommencing. He had prescribed quinine, as in ordinary intermittent fever, but without any benefit. He then changed the treatment to iodine, maltopepsyn and carbolic acid. In two cases the patients had died in thirteen or fourteen weeks from pure exhaustion. In another case the patient had recovered after eight weeks. The peculiarity was the variation of the symptoms from one kind of fever to another, and the long duration of the disease.

Dr. Riddel thought these were cases of a kind of malarial fever, partaking of the nature of cerebro-spinal meningitis.

Dr. Ross, of Montreal, did not think that they were in a position to discuss these cases. There might have been suppuration of some internal organ, such as the kidney. This could only be ascertained by examination of the urine. It was not impossible that they might have been cases of ulcerative endocarditis.

Dr. Tye, of Chatham, stated that some time ago a large number of cases of the kind so graphically described by Dr. Harrison had come under his observation. Indeed it had been at one time almost epidemic, and was considered a form of cerebro-spinal fever.

Dr. Holmes, of Chatham, had had similar cases under his observation. He did not agree with Dr. Ross.

Dr. Mullin, of Hamilton, read a paper on "Diphtheria." There were, he said, various forms of the disease, and in some cases other ailments were set down as diphtheria. He described a case of diphtheritic croup that he had treated. He prescribed an emetic of ipecacuanha, followed by steaming. In a few days the symptoms became unfavorable. The patient was attacked with severe asphyxia, and tracheotomy was performed. An attack of ague supervened, but ultimately the patient recovered. The low forms of animal growth that invaded the fauces and tonsils in this disease were very tenacious of life. The bacteria and bacilli present should be destroyed if possible by cauterization or otherwise. Opinions differed as to the value of treatment in diphtheria. Some held that a certain proportion of cases would recover by the unaided *vis medicatrix naturæ*, while others would not recover under any treatment.

Dr. Holmes, of Chatham, read a paper on "Cholera Infantum." Among its causes, he said, were hot weather, damp atmosphere, defective nourishment, bad ventilation and drainage, unsuitable clothing and indigestible food, and to prevent the disease, such of these causes as were preventable should of course be removed. The treatment should aim at reducing the temperature and restoring the normal condition of the stools. To reduce the temperature sponging might be used or the evaporation of spirits on the body. The use of opiates, either for the purpose of relieving pain or

as astringents, should be carefully avoided. He recommended the use of castor oil and minute doses of mercury.

Dr. Macdonald, chairman, was glad that the disease was not now so virulent as formerly, and better modes of treatment were in vogue. He had often prescribed a long trip on the lake with success.

Dr. Ross, sr., had found the use of laxatives and sedatives advantageous.

Dr. Stewart gave an account of three cases of "Sciatica," and one of "Painful Stump," treated by "Stretching the Sciatic Nerve." In each case he had used antiseptic precautions. Ether should be given during the operation in preference to chloroform. The operation was a very successful one, 97 per cent of all cases being either cured or greatly relieved.

The paper was discussed by Drs. Ross and Workman.

Dr. Prevost, of Ottawa, read a paper on "Tumour of the Bones of the Skull." There was an aperture in the frontal and parietal bones. The skin covering the tumour was of normal colour. The intellect of the patient did not seem much affected. He was, however, drowsy and dull. He walked slowly and his memory seemed affected. He went to the hospital and soon fell into a state of indifference, which was after a time followed by coma and death. The autopsy of the case showed that the morbid products had originated in the bones of the skull. He also exhibited the morbid specimen.

Dr. Cameron exhibited a case of "Pseudo-Hypertrophic Muscular Paralysis." The treatment was the administration of iron, arsenic, and the application of galvanism. The boy showed the peculiarity of his movement in ascending stairs and also in rising off his back. The Dr. stated his views in regard to the pathology of the case, which were those of Charcot and Bristowe.

Dr. Temple said such cases were rare, and were found chiefly amongst boys of the age of the patient, and mentioned a case under his care, in a man 64 years of age.

Dr. Graham believed the pathology to be first a sclerosis, and secondly a change in the muscles.

Dr. Sheard gave it as his opinion that in such cases the lesion originated in the anterior horns of the spinal cord.

Dr. Black submitted notes of an autopsy of a

case of "Echinococcus Disease of the Lung." He also exhibited the morbid specimens, and narrated the history of the case, which lasted during a considerable time, resulting ultimately in death.

Dr. Osler said that the fatal result in this case was due to suppuration of the cyst, which was one of the chief dangers of the disease. The spleen had been the seat of a cyst, which had developed to the size of a child's head. The cyst in the liver was also of enormous size.

Dr. H. P. Wright, of Ottawa, read a paper on "Phantom Pregnancy." The tumour was situated on the left side and developed in such a way as to produce in the mind of the patient the idea of pregnancy. The movements of the tumour tended to confirm this idea as they so much resembled those of the living fœtus. When chloroform was administered reduction was effected, thus proving what was suspected. The woman recovered.

Drs. Ross and Sloane discussed the subject.

Dr. Ellis read a paper on "The Chemical Composition of the Milk of Cows fed on Distillery Refuse." He had made an analysis of the milk of cows fed with different kinds of food. The mean of the solids in the milk of distillery cows was 14.64; of other cows 11.82. The amount of fat in distillery cows' milk was greater than in the milk of others, the minimum of the former being equal to the average of the latter. The caseine, sugar, and ash ingredients were much the same in both. The principal difference was the greater amount of fat in the milk of distillery cows. The distillery refuse when examined was found to consist of grain, with the sugar and saccharine matter removed. The fat and albumen remained, together with a small quantity of alcohol, as small as distillers can make it. He could not say whether the use of this food produced any morbid condition in cows.

Dr. Workman had heard that cows could not be kept on this kind of food without degeneration.

SURGICAL SECTION.

The section met at 2 p.m.

Dr. Gardner of Montreal read a very interesting paper on a "Rare Form of Uterine Tumor."

Dr. Hingston, of Montreal, read a paper on "Certain Obstructions of the Air Passages." He reported a case where a horn button had become lodged in the nostril, his attention being first called

to the boy for general nervous trouble, when he discovered the existence of the button, which he removed, followed by a speedy recovery. Another, where a lady had swallowed a false tooth with its setting. There was no distressing symptoms for a considerable time, when a cough set in. Inversion was first tried, without benefit. After becoming much worse, she consented to tracheotomy for its removal. The paper was discussed by Drs. Major, Harrison, Fulton, Wright, and Roddick.

Dr. Fulton read a paper on "Polypoid Fibroma of the Bladder," and exhibited a specimen of a case occurring in a child. Cystotomy, he said, was the only rational mode of treating these growths. A double-eyed catheter might be used with advantage in the case of small polypoid growths. The paper was discussed by Dr. Hingston and others.

Dr. Ryerson read a paper on "Polypus Nasi." He described the various modes of treatment, giving his opinion that removal with a "snare" was the best.

Dr. R. A. Reeve, of Toronto, read a paper on "Orbital Diseases," dwelling mainly on the importance of an early recognition of such affections and timely operations for their removal. Specimens of tumors removed and photographs of cases were exhibited.

Dr. Walker, of Detroit, read a paper on "Modern Lithotripsy," describing several cases in which he had used Bigelow's instrument with success.

Dr. Ferguson, of Toronto, gave a report of three cases of "Eczema," which he had treated successfully by the internal administration of viola, and by the use of conium baths.

Dr. Cameron exhibited a woman suffering from an immense tumor, which covered her whole face.

Dr. Fenwick, of Montreal, made a few remarks on "Excision of the Knee Joint." In excision of the knee in children it was desirable to preserve the growing power of the limb. If the parts from which the bone grows could be preserved the operation could be performed in young children, with every prospect of a useful limb. He showed a specimen taken from a girl of 11 years, from whom he had removed the knee joint, and in which there was good bony union between the epiphyses of the bones. He had had in practice and hospital in all twenty-six cases. Of these twenty-two had recovered with useful limbs. Two had died: one from pyæmia, on the 18th day after the opera-

tion : the other at the end of eleven months from heart disease, following an attack of acute rheumatism.

Dr. D. H. Goodwillie, of New York city, read a paper on "The Operation for Closure of the Hard Palate and Hare Lip Immediately after Birth." He said that closure of the hard palate should be done before the child is two months old to avoid injuring the developing teeth, and the soft palate before the child begins to speak, at about two or three years of age. By the use of a wax model and diagrams the Dr. illustrated his procedure. The child is placed under an anæsthetic, and by means of a small revolving knife and the surgical engine a small V-shaped section was removed inside of the alveolar process of the intermaxillary, also running up into the septum a very little and at the same time the edges of the cleft of the hard palate are freshened by the revolving knife. Holes are also cut on either side of the hard palate for the purpose of passing suture-pin clamps to hold the maxillæ together. Just enough was taken away by the V-shaped section to allow the alveolus of the intermaxillary to resume its normal position. Now, by means of a forceps the maxillary bones are forced together so as to close the cleft of the hard palate. Then a nasal forceps is passed into the nostrils, grasping the septum, and the nose is drawn into perpendicular position, and at the same time the intermaxillary is forced into its normal place closing up the V-shaped section made by the revolving knife.

The alveolar ridge of the intermaxillary now meets with the maxillary of the opposite side. They are held together by the suture-pin clamps which he has devised for the purpose, made of steel and gold-plated.

The cleft in the lip is now closed, by first carefully applying the compression lip clamp on each side of the cleft lip, to prevent hemorrhage.

After the edges are pared, then carefully approximate both skin and mucous membrane, by passing the first suture in the vestibule of the nostril and ending with the vermilion border and then complete the operation by passing the suture pin clamps to take the strain off the sutures.

The advantages of this method are, viz. :

1. The cleft in the hard palate is closed in all cases where there is a normal amount of bone developed.

2. The alveolar ridge with the tooth germs are saved and brought into place, securing as near as possible the normal outline of the mouth and subsequent development of the teeth.

3. The nose is brought into normal position, and over-distended nostril restored.

4. The external normal appearance of the face is reclaimed.

A conversazione was given in the evening by the medical profession of Toronto to the members of the Association and ladies, at the Education Department, St. James' Square. The grounds were illuminated with Chinese lanterns, and the theatre, library, and other rooms of the building were brilliantly lighted and fitted up for the guests. The library was used as a reception room.

Shortly after assembling, the guests repaired to the theatre, where the chair was taken by Dr. Canniff. The chairman introduced Dr. Workman, who delivered a brief but hearty address of welcome, interspersed with that dry humour which always characterizes the doctor's utterances. Dr. Fenwick made a suitable reply.

Dr. Carpenter, who was present, was asked to make some remarks. He referred to the great progress of Canada, and the satisfaction with which that progress was regarded in England. During his visit he had met with nothing but feelings of attachment to the Mother Country. He also referred to their American brethren and the large number of distinguished men on the other side of the border. He had received the same welcome from Columbian as from his Canadian friends. Gatherings such as that now being held he regarded as of the greatest importance. During the past few days he had had conversations which had produced a great impression on him. He felt refreshed by the untrammelled state of existence enjoyed here, compared with London, from which he had come. He referred to the value and benefits of educational endowments, and eulogized the educational provisions of Canada. He had made himself acquainted with some of these establishments, such as the Toronto Science School, and spoke in high terms of them. He next referred to Emerson, who he found upheld the maxim, "Thought rules the world." Dr. Johnson said of Goldsmith, "*Nihil tetigit quod non ornavit.*" The same might be said of "thought." He assured

them he would leave Toronto with the liveliest feelings of gratification at their great progress and prosperity, and feelings of satisfaction with the intercourse he had had with his medical brethren and others.

The Misses Hillary, Miss Berryman, Mr. Pernet, Drs. W. W. and A. J. Geikie, and Mr. H. Creswell had volunteered their services for the musical programme. The guests now abandoned themselves to promenading through the museum and grounds, the band of the Tenth Royal Grenadiers meanwhile furnishing excellent music. Refreshments were served during the evening.

THIRD DAY'S PROCEEDINGS.

Dr. Worthington read a special report upon "Malaria," which formed part of the report of the Committee on Climatology and Public Health. It stated that the committee had sent out a series of questions to different medical men in various parts of the province, with the request that they be returned and answered, to serve as the foundation of a report on malarial poisoning. Thirty-seven circulars were sent to seventeen counties, and replies received from twelve medical men residing in ten different counties. In four of these no malaria was reported to have existed for many years, but in the remaining six it was said to be prevalent. In the malarial districts, the answer was that it prevailed to an unlimited extent, and was termed the curse of the country. In the districts referred to, the country around was reported to be flat, with sluggish streams whose beds and banks consisted of alluvium. The first effect of cultivation was to increase the evil, but it afterwards became the true remedy. Malarial poisoning seemed to be more active after the month of July until the cold weather. In the Lake Scugog district, malaria prevailed to such an extent as to cause the people to request the attention of the Government to the matter. The better draining of all low-lying land was suggested as a remedy, with the cultivation of the eucalyptus globulus, as practised in the marshy districts of the South.

The report was discussed by Drs. Ferguson, Riddell and Oldright.

Dr. Playter submitted the following resolution from the Sanitary Committee:—That for the present the collection of sanitary statistics shall be

confined to the cities and large towns of the Dominion, the results to be published monthly, and the deductions drawn therefrom to be circulated in the various centres specified. That a commission be appointed by the Dominion Government in order that by consultation and co-operation with the Local Governments a common basis may be arrived at for carrying out such sanitary measures as may be necessary for the guidance of the Dominion Government. The commission to consist of two or more medical men with a legal adviser.

The President said it was important that there should be a committee in communication with the Government on the subject, and he hoped that the subject of the report would be sent to the Government as the official report emanating from the Association.

Dr. Oldright said disease statistics would show when a certain disease was threatening a district. Death statistics often gave the information too late. He would regret any resolution of the kind recommended by the committee. In order to put restrictive regulations into force it would be necessary to get information at the time the disease was raging, and not when it was too late to be remedied. He moved in amendment that the statistics be not confined to the towns and cities.

Dr. Grant said that the Dominion Government had only granted \$10,000 for the whole of Canada, and it would be impossible to do more with that sum than was suggested by the committee. To pass the amendment would be to neutralize the whole action of the committee. They could do no better for the present than collect the statistics from the older towns and cities. The system could be subsequently extended if found to work well.

The original motion was carried by a vote of fourteen to two.

The Nominating Committee brought in a report recommending the election of the following officers for the ensuing year, which was adopted:

President.—Dr. J. A. Mullin, Hamilton; *Vice-Presidents*.—Dr. Tye, Chatham, Ont.; Dr. Gibson, Cowansville, Que.; Dr. Atherton, Fredericton, N.B.; Dr. Jennings, Halifax, N.S.; Dr. Kerr, Winnipeg, Man. *General Secretary*.—Dr. Osler, Montreal. *Treasurer*.—Dr. Robillard, Montreal. *Local Secretaries*.—Dr. Saunders, Kingston, Ont.; Dr. Brunelle, Montreal, Que.; Dr. Coleman, St.

John, N.B. ; Dr. Almon, Jr., Halifax, N.B. ; Dr. Whiteford, Winnipeg, Man.

Committees.—On Publication, Dr. Ross, Montreal ; Dr. I. H. Cameron, Dr. Fulton of Toronto, the general secretary and the treasurer. On Therapeutics—Chairman, Dr. H. P. Wright, Dr. Tye, Chatham, and Dr. Jas. Bell, Montreal. On Medicine—Chairman, Dr. Stewart, Brucefield, Dr. F. W. Campbell, Montreal, and Dr. Allison, St. John, N.B. On Surgery—Dr. Grasett, Toronto ; Dr. Brunelle, Montreal, and Dr. Atherton, Fredericton. On Obstetrics—Chairman, Dr. Kennedy, Montreal. On Necrology—Chairman, Dr. Fulton, Toronto ; Dr. Atherton, Fredericton ; Dr. La Chapelle, Montreal. On Climatology—Dr. Laroque, Montreal ; Dr. Botsford, St. John ; Dr. Worthington, Clinton ; Dr. Playter, Toronto. On Ethics—Drs. Gardner, Montreal ; Marsden, Quebec ; Bayard, St. John ; Parker, Halifax ; W. J. Almon, Halifax ; Steeves, St. John ; Beaudry, Montreal ; Chas. Moore, Sr., London. On Arrangements—Drs. Sullivan, Saunders, Fenwick, Metcalf, and Sweetland.

Kingston was selected as the next place of meeting on the first Wednesday of September 1883.

After the installation of the newly elected President, formal votes of thanks were tendered to the retiring President, the Mayor and Corporation of Toronto for the use of the Hall, to the Railway and Steamboat Companies, etc. etc., and the Association adjourned.

After adjournment, the members proceeded to the asylum, where they were most hospitably entertained by Dr. Clark, the medical superintendent.

During the session many of the members of the association visited the Hospital and were shown over it by Dr. O'Reilly, the medical superintendent. They expressed themselves as highly pleased with all the arrangements.

Several interesting exhibits of pharmaceutical preparations and surgical instruments were shown by different houses.

Messrs. Reed & Carnrick manufacturers of preparations of Maltine, and The New York Pharmaceutical Association, both represented by Mr. Gisborne, of Toronto, had a fine exhibit of medicines, and distributed samples of lactopeptine among the members of the Association. Messrs. Wyeth & Bro., of Philadelphia, showed an assortment of pharmaceutical preparations, compressed pills, and

fluid extracts. Mr. Hazen Morse, of Toronto, also had a fine display, and distributed samples of malt-pepsyn. Messrs. Stevens & Son, of London England, exhibited some beautiful specimens of surgical instruments.

ONTARIO BOARD OF HEALTH.

SANITARY CONVENTION.

The first Sanitary Convention under the auspices of the Provincial Board of Health, convened in St. Thomas on the 19th ult. The following gentlemen were present :—Dr. W. C. Van Buskirk, Mayor and chairman of the local committee ; Dr. W. Oldright, chairman of the Board ; Drs. Yeomans and Cassidy, members of the the Board, and Dr. P. H. Bryce, Secretary ; Dr. Cascaden, M.P.P., Iona ; Judge Hughes, St. Thomas ; Dr. Ellis, Public Analyst ; Rev. Prof. Austin, Alma College ; Dr. Kains, sec. of the local committee ; Dr. Wilson, Dr. W. E. Smith, Mr. Coyne, St. Thomas ; Dr. McLarty ; Mr. Coatsworth, City Commissioner, Toronto.

Mayor Van Buskirk welcomed the members of the Convention to St. Thomas, on behalf of the citizens, expressing their appreciation of the determination to select St. Thomas as the place of meeting for the first Sanitary Convention in Ontario. He noted the immense field covered by sanitary measures, and felt convinced that it could not be gone over at a single convention. He recognized the wisdom of the Legislature in creating the Provincial Board of Health.

Judge Hughes, of St. Thomas, read a paper on the "Adulteration of Food," prefacing it with the remark, as a layman, that social science and sanitary reform do not belong to any one profession, and may be taken part in by many. He commented in severe language on the dishonest tradesman who bolted his doors against thieves, and then educated his clerk for the prison by instructing him in the adulteration of articles in stock. Educate young men into the mysteries of adulteration—milk watered, oatmeal ground with shorts, sugar glucosed, coffee made from clay or peas or chicory, tea poisoned, a loaf made under weight, calico sized and weighted with plaster—and you prepare matriculates for the penitentiary. The adulteration of tea was exhaustively treated upon, especially the facing of teas with coloring matter. He advocated

the appointment of a Sanitary Commission with power to investigate and remove the various evils complained of.

Dr. Ellis, concurred in the paper of Judge Hughes, and said that all green teas even the best qualities were faced with Prussian blue and china clay. He also alluded to the adulteration of milk.

Drs. Yeomans and Wilson also commented upon the paper.

A committee was appointed, consisting of Drs. Yeomans and McLarty, and Messrs. Coyne, Farley, and Casey, to report on desirable amendments to the Adulteration of Food Act. A committee was also appointed to inspect and report on sanitary apparatus, when the meeting adjourned.

At the evening session a letter was read from Dr. Carpenter, in which he emphasized the teaching of elementary physiology in every public school. He also referred to the removal and utilization of *excreta*, and recommended the separation of house drainage from surface drainage. He also recommended compulsory vaccination.

Dr. Oldright then delivered the inaugural address. This was followed by a paper on the "Impurities of Water" by Dr. Ellis, which was discussed by those present.

Dr. R. W. B. Smith, of Sparta read an interesting paper on "Contagion" which was well received.

Rev. Prof. Austin, of Alma College, read an able paper on "Public Schools and Public Health."

September 20th, 1882.

The committee did not meet this morning according to programme, but met at eight in the evening.

The committee on sanitary apparatus reported that the exhibition of sanitary apparatus did not come up to their expectations. A Toronto plumber was prevented through illness from sending apparatus for the exhibition.

Dr. Coventry, of Windsor, read a valuable paper on "Prevention of Controllable Diseases," such as cholera, yellow fever, typhus, typhoid, scarlet fever, diphtheria, measles, whooping cough. He strongly advocated quarantine and local supervision by boards of health, also compulsory vaccination, and expressed the hope that a minister of

Public Health would form a member of the Government.

On motion of Mr. McDougall the following motion passed:—"This Convention has heard with much gratification Dr. Coventry's account of the success which has attended the adoption in the town of Windsor of measures for arresting the spread of scarlet fever, diphtheria, and other contagious diseases, and would urge upon other municipalities the adoption of similar measures, such as, prompt isolation in their own houses, or in hospitals of the first named, and all cases of these diseases, which at present made such havoc among our people."

Dr. Vanbuskirk spoke on the "Disposal of Sewage," referring to three methods, viz., the cesspool, dry-earth closets, and water closets. He gave the latter the preference for thickly populated cities. Ventilating pipes fixed to the soil pipes outside would effectually ventilate the sewers.

Dr. Cassidy, of Toronto, read a paper on "The Heating and Ventilation of Buildings," after which the meeting adjourned.

Selected Articles.

UTERINE HEMOSTATICS.

By J. BRAXTON HICKS, M.D., F.R.S., Guy's Hospital, London.

As a small contribution to the practical portion of the subject of uterine hemostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to textbooks, we find it recommended that in case of threatened abortion with much hæmorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management there is much of distress to the patient in the use of the vaginal plug; and with regard to its hemostatic effect very much of uncertainty, and generally partial failure; and in the hands of the

unskilful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favors decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand; and although we may extemporize one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hæmorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hæmorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or larger; wind round this end, for about three inches down, strips of cambric rag, lint or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is

obtained. The strips of the other material can be laid on similarly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, or the end of a long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hæmorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape round the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we can not send home for a showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In cases of flexion with abortion (and it is this complication which so frequently increases the hæmorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful; for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.—*British Med. Journal*.

ON THE TREATMENT OF CONVULSIONS IN CHILDREN.

Eustace Smith, M.D., F.R.C.P. *London Lancet*, gives the following:

When called to a case of convulsions the practitioner should lose no time in questioning the attendants, but should have the child placed in a warm bath of the temperature of 90° F., and apply sponges dipped in cold water to his head. This is the time honored remedy. It is certainly an innocent one; it may tend to quiet the nervous system; and it is one the efficacy of which is so generally recognized among the public that it would be unwise to court unfavourable criticism by neglecting to employ it. The bath must not be continued too long. In ordinary cases the child should be allowed to remain in it for ten or fifteen minutes, according to his age. If, however, the patient be an infant who has lately been reduced by an exhausting diarrhoea he should not be allowed to remain more than two or three minutes in the hot water, and cold applications to the head must be dispensed with. If the convulsions have ceased when the case is first seen the bath need not be

used; but we should not omit to have the child completely undressed, and then to see that he is placed, lightly covered, in a large cot, and that the room in which he lies is well ventilated and not too light. Care should be taken to unload the bowels by a large enema of soap and water, and if the child be noticed to retch, his stomach may be relieved by a teaspoonful of ipecacuanha wine. In the case of a teething infant, opinions differ as to the propriety of lancing the gums. There is no doubt that this operation is a useless one if employed with any hope of hastening the eruption of the teeth; but if the object be to relieve pain and tension I consider the practice judicious, and never hesitate in such circumstances to have recourse to it. If it be desirable to remove all sources of irritation, surely such a source of irritation as a swollen and inflamed gum should not be disregarded. Lastly, if it can be discovered that the child has had pain in the ear, or if the tympanic membrane can be seen to be red, the ear should be syringed out and fomented with hot water, and, if thought desirable, a leech may be applied within the concha, the meatus being first plugged with cotton wool.

If in spite of these measures the convulsions return, or signs are noticed of continued irritability of the nervous system, it is best to administer a dose of chloral. Two or three grains can be given to a child between six and twelve months old; and if the patient be unable to swallow, half as much again may be administered by the rectum dissolved in a few teaspoonfuls of water. If necessary, the dose can be repeated two or three times a day. Bromide of ammonium and belladonna are also largely employed in these cases. The former can be given in three or four grain doses every two hours to a child of from six to twelve months old; the second in ten or fifteen-drop doses two or three times a day to a child of the same age. Infants are so tolerant of this drug that it should be given to them in a dose which can produce some appreciable effect. In the convulsions of whooping-cough where the spasm of the glottis is extreme, treatment by bromide of ammonium or potassium is especially indicated. The bromides are well borne by quite young children, and we should not fear ill consequences from what may appear a very large dose. Chloroform is often employed, but it is decidedly inferior to chloral and much more troublesome.

If the child has been lately the subject of exhausting discharges warmth should be employed, and stimulants, such as the brandy and egg mixture of the British Pharmacopœia, be given energetically. If the convulsive attacks are followed by signs indicative of intracranial mischief, such as stupor, squinting, ptosis, etc., the child should be kept quiet and an ice-bag be applied to his head. In all such cases the treatment must be conducted

according to the condition from which the convulsion is supposed to have arisen.

When the convulsions have ceased, and signs of irritability of the nervous system are no longer to be observed, we must take steps to improve the general condition of the patient. His bowels should be attended to and his diet carefully regulated. If rickets be present it must be treated. Most children in whom the convulsive tendency exists are benefited by iron wine and cod-liver oil, for the nutrition is usually at fault, and both the alcohol and the iron contained in the wine are beneficial, while the oil is of the utmost value in supplying nutritive deficiencies. Fresh air, too, is of the utmost importance, and the child should be warmly dressed and be taken regularly out of doors.

CROSSED ACTION OF THE SPINAL CORD—
ANOTHER CHANGE OF BASE.—The present generation of physicians have been taught to believe that owing to a decussation of fibres at the base of the brain, each hemisphere holds its relation to the opposite side of the body and not to its own side. But we are now required to modify our views on this subject, if not to throw them aside. According to the *London Lancet*, Dr. Brown-Séquard repudiates the old theory. The numerous researches he has undertaken during the last four years seem to him to involve conclusions exactly contrary to the opinions which are universally received. For example, against the assertion that the irritation of the motor region of the brain uniformly produces movements in the limbs on the opposite side, he opposes certain experiments of his own. These show that irritation of one side of the pons Varolii or of the medulla, even of the anterior pyramid, causes eight or nine times out of ten, movements of the limbs on the same side, and the same effect is observed when after a transverse division of one-half of the medulla, the superior part of the pons is stimulated, mechanically or by electricity, in the part considered as motor. Irritation of the cerebral peduncle in the part considered as motor often causes movements of the limbs on the same side. This result occurs five or six times in ten when the stimulation is applied to the upper part. If the fibres are galvanized which pass from the corona radiata or corpus striatum to the peduncle, movements are often observed on the corresponding side of the body. If these parts are divided transversely on the right side or on the left, the mechanical excitation thus produced rarely causes movement, but when it does the effect is usually manifested on the same side as the irritation. Even stimulation of the motor zone of the cortex, as Couty, has shown sometimes causes movements on the corresponding side. Moreover, Dr. Brown-Séquard has repeatedly shown that if this zone is galvanized after the lateral half of the medulla or

of the pons Varolii is divided, the movements in the opposite limbs, instead of being prevented by this section, occur with still greater force than before the division of these conductors which have believed to be alone capable of transmitting the stimulation of this zone to the limbs.

According to received doctrines, if one lateral half of the cervical cord is divided at the second pair of nerves and different parts of the brain are then stimulated, mechanically or electrically, on the same or on the opposite side to the spinal lesion, no movement should occur, or only a very slight movement in the members on the same side as the lesion. But Dr. Brown-Séquard finds that, under these circumstances, stimulation of the brain causes energetic movements of the limbs, such as "bipedal" movements, diagonal or lateral, to the right or left, or a movement of three, or even of four limbs. He concludes from this that one-half of the cord will suffice to transmit to the limbs, on both sides of the body, the excitation caused by stimulation of the opposite half of the brain.

According to received doctrines the transverse section of the two lateral halves of the base of the brain, the one section at a distance of one centimetre above or below the other, ought to destroy all or almost all communication between the spinal cord and the portions of the brain above the higher section, so that mechanical or chemical excitation of the cortex should cause no effect on the limbs. But Dr. Brown-Séquard asserts that under these circumstances not only does stimulation of the motor centres act energetically upon the limbs, but the same effect is produced by stimulation of the parts which are not considered to be motor, such as the optico-striate bodies. In this case, also, the effect is usually most marked on the same side as that stimulated. An analysis which Dr. Brown-Séquard has made of 500 cases of unilateral convulsions in consequence of varied lesions of the brain show that the same is true of man as of animals. Irritation of the base of the brain and the adjacent motor regions causes convulsions more frequently on the side irritated than on the other. The superficial parts of the brain, it is true, produce chiefly crossed convulsions, but irritation in all parts may cause convulsions on the same side.

The conclusions drawn by Dr. Brown-Séquard are, that one of the chief foundations for the theory of psycho-motor centres, and of the crossed functional relations between the hemispheres and the limbs must be considered to have lost its value; and, secondly that the excito-motor zone of the cerebral surface, and indeed all the excitable parts of the brain, are capable of putting in action the limbs of the same side, as well as those of the opposite side, and that they may produce these effects after the transverse division of one-half of the pons Varolii, of the medulla, or of the cervical

cord, and even after two sections of the base, one of the right half and the other of the left, provided a certain interval exists between the two.—*Pacific Medical Journal*.

DIAGNOSIS AND TREATMENT OF TUMORS OF THE BLADDER.—The case of successful removal of a tumor of the bladder reported by Sir Henry Thompson at the last meeting of the Royal Medical and Chirurgical Society will no doubt awaken fresh interest in this important subject. We will not here repeat the many points dwelt on in the subsequent discussion, but would refer to two only—the difficulty of diagnosis, and the safety of Sir Henry's operation. All the speakers touched upon the former, none questioned the latter. From the discussion and records of cases it seems evident that while there are few removable bladder tumors, and many unremovable ones, which can be reasonably diagnosed to be such during life, there is a large number of cases in which with only his present means, the surgeon must remain in doubt. All that is wanted in this case is to be able to *feel* the tumours. In the female, where the finger can be easily passed through the urethra, and the whole interior of the bladder explored, the diagnosis of these tumors can, we presume, always be made. Sir Henry Thompson will have done great service with his paper if it helps to draw attention to the ease and safety with which the male bladder can be thoroughly explored through a wound from the perineum into the membranous portion of the urethra. Such a wound does not interfere injuriously with the neck of the bladder, is easily made with precision, and heals readily. Every part of the viscus can be explored through it, without violence or risk, and medium sized tumors, at any rate, can be removed through it. Whether the median incision into the urethra be the best for removal of tumours in all cases we are not now anxious to show: its superiority over others for purposes of diagnosis we venture to think none would question, and we would recommend that in any case where a tumor of the bladder is reasonably suspected, and where other means of examination have not demonstrated that it is unsuitable for removal, the bladder should be explored by this safe and efficient means.—*Lancet*.

To be copied into the practitioner's note-book: Inhalation of five to ten drops of amyl nitrite will break up the chill of malarial fever; so will the hypodermic injection of one-sixth of a grain of muriate of pilocarpine. It is said that twenty drops of oil of turpentine will control the diarrhoea of typhoid fever. Two to five drops of wine of ipecacuanha three times a day will, in the majority of cases, check the vomiting of pregnancy.—*Independent Practitioner*.

THE CANADA LANCET.

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BRITISH MEDICAL ASSOCIATION.

The British Medical Association held its 50th annual or Jubilee meeting in Worcester, England, its birth-place, on the 8th of August and four following days, under the presidency of Dr. W. Strange, of Worcester. There was an attendance of seven hundred and fifty members present. The President in his opening address alluded to the founding of the Association in 1832, by Sir Charles Hastings, of Worcester, and a few devoted fellow-workers, and paid a suitable tribute to their memories. He also recalled to the memory of the Association the distinguished galaxy of names that marked that decade in medicine — Lawrence, Abernethy and Cooper, who were already passing away; Copeland, Latham, Marshall Hall, Brodie and Watson, in England; Barclay, Gregory, the Munroes, the Thompsons, Knox, Bell, Alison and Christison, in Scotland; Graves, Stokes, Colles and many others, in Ireland; on the Continent were Louis, Andral, Chomel, Magendie, Roux and Milne Edwards in France, whilst Rokitansky, Skoda, Liebig, and later, Virchow, were raising the German school out of its backward condition toward the pitch of eminence to which it has since attained. He next alluded to the establishment of the *Lancet* as the leading medical journal, and its agency in destroying monopolies, and redressing abuses within and without the profession. He then contrasted the condition of the profession at that time with that of physicians of the present day, and concluded an able address by urging the importance of strengthening the branches, and of

modifying the electoral system, so as to infuse new blood into the senate of the Association.

The address on medicine was delivered by Dr. W. F. Wade, of Birmingham. He referred to the therapeutical methods in use half a century ago, the chief characteristic of which was blood-letting and alluded to Marshall Hall's opposition to the practice, and his final triumph. He also showed how Hall's vivisection experiments were justified by their results, and defended Harvey's claim as the discoverer of the circulation of the blood. He next dilated upon the progressive nature of medical and therapeutical science, not only in the matter of new drugs, but also in our knowledge of how better to use old ones. In conclusion he cautioned his hearers against unduly subordinating the physiological to the restorative basis of treatment.

The address on surgery was delivered by William Stokes, F.R.C.S., Eng., of Dublin, in which he enumerated some of the chief advances in surgery during the last half century. The three to which he gave especial prominence were, 1. The discovery of anæsthesia. 2. The antiseptic treatment of wounds. 3. Subperiosteal surgery, and osteogenesis. He concluded a most eloquent address with a strong and earnest appeal in favor of vivisection. Prof. Stokes, who is a son of the celebrated Dr. Stokes of Dublin, proved himself to be a medical orator scarcely, if at all, inferior to Sir James Paget.

The association was divided into eight sections each of which was well attended. In the section on medicine the opening address, which was retrospective in character, was given by Dr. Clifford Allbutt, President, and was characterized chiefly by its excellence as a literary effort.

Dr. W. S. Playfair then opened a discussion on "The Systematic treatment of aggravated Hysteria and allied forms of neurasthenic diseases," in which he strongly recommended Dr. Weir-Mitchell's "massage" treatment in appropriate cases. There was considerable difference of opinion in the section as to the influence of uterine diseases in producing these conditions.

Dr. Austin Flint read a paper on "The Self-limited Duration of Pulmonary Disease," and mentioned several cases in which the disease subsided without any special treatment. Dr. C. T. Williams, of London, also read a paper on "The Contagion of Phthisis," which he held was incom-

patible with the theory of germs. Dr. A. J. Harrison read a paper on "Primary Endocarditis," in which he maintained its possibility of occurrence, and gave the history of four cases.

In the section on Surgery, Mr. J. Greig Smith opened the discussion on "Early operative treatment of joint disease as a preventive of excision." His plan was to scrape away diseased tissues, move the joint freely, and drain antiseptically. Mr. Prigden Teale said his plan of treatment was to make subcutaneous incisions into the capsule of the joint and allow the fluid to escape into the surrounding tissues to be absorbed. Martin's elastic bandage was recommended by some of the speakers to promote absorption of the effused fluid. The subject of litholapaxy received attention at the hands of Mr. Reginald Harrison, of Liverpool. He reported a case in which he removed a calculus weighing $2\frac{1}{2}$ ounces, and the patient recovered without any unpleasant symptoms. Mr. W. Adams read a paper on "Forcible Movements in Stiff Joints." Cases suitable for operation were those of traumatic origin in healthy constitutions, and those due to rheumatic inflammation; those due to strumons disease, and acute suppurative inflammation were unfavorable. He preferred the gradual to the violent method of breaking up the adhesions.

In the section on Obstetrics Dr. J. Williams read a paper on "Subinvolution of the Uterus," etc. Among the causes he mentioned general debility, post-partum hemorrhage, retention of portions of placenta, laceration of the perinæum, and pelvic inflammations. The treatment consisted in removing the cause, rest, and the use of warm (112° F.) disinfectant vaginal injections. Dr. Bantock of London read a paper on "Hysterectomy," and reported 21 cases in which he had removed the uterus for fibroids, with fifteen recoveries. The great danger after removal of the uterus was from hemorrhage and to prevent this he recommended a suitable clamp. He relies on absolute cleanliness and discards entirely, all antiseptic treatment.

The pathology of "Diabetes," and the "Changes which take place in the Great Sympathetic in Chronic Bright's Disease," were discussed in the Pathological Section and microscopical specimens of the latter here exhibited, showing degeneration of the nerve cells in the semilunar ganglia.

The annual report of the Council of the Association showed that the receipts for the past year were about \$50,000, and the number of members upwards of 9,560. The social side of the meeting was, as usual, very agreeable. Dinners, garden parties, excursions, especially the one to Stratford-on-Avon, were in order, and many of the members availed themselves of the customary hospitalities. Drs. W. T. Aikins and J. E. Graham, of Toronto, attended the meeting, and were elected members by invitation.

AMERICAN SCIENCE ASSOCIATION.

The meeting of the American Association for the advancement of Science, was held this year in Montreal, commencing on the 23rd and closing on the 30th of August, under the presidency of Dr. Dawson. The attendance was very large, nine hundred and fifty members having registered their names. Three hundred and thirty new members were elected, and no less than two hundred and fifty papers were received in the different sections. The meeting was in every sense of the term, a most successful gathering—one of the most successful meetings in the history of the Society. The President, in his opening address, alluded to his election to the presidency as evidence of the Society's expansion over the Continent, and its disregard of national boundary lines. The delegates were welcomed to the city of Montreal by Dr. Sterry Hunt, in an appropriate address. He also referred to the expansion of the Association, and expressed the hope that it might some day meet in the city of Mexico.

The business of the Association was conducted in nine sections, each of which was addressed by the respective president. Many interesting and valuable papers were read and discussed in the sections. Prof. Brush, the retiring President, read a paper on the "Progress of American Mineralogy." This paper which was a most interesting one, is published in the *Popular Science Monthly* for October. Dr. Asa Gray, the distinguished botanist, gave an interesting address on the "History of the Study of the North American Flora." Dr. John Rae, of London, England, read a paper on "Arctic Explorations and Ethnology." Rev. Dr. Houghton, of Dublin, also read a paper in which he advanced a "New Theory of the Evo-

lution of the Planets." Many other papers of equal merit and interest were read and discussed in the various sections.

Several distinguished men from abroad were present, among whom we may mention Prof. W. B. Carpenter, of London; Dr. Kovalevski, of Moscow; Dr. Koenig, of Paris; Mr. Fitzgerald, of Dublin, and D. Szabo, of Buda-Pesth, Hungary. The last named gentleman read a paper in the Chemical Section, and Dr. W. B. Carpenter one on "The Microscope," in the Microscopical Section. The social side of the meeting was all that could be desired, and reflected credit upon the well-known hospitality of the citizens of Montreal. In addition to the entertainments in the city there were excursions to Ottawa, Quebec and other places, which the members in considerable numbers availed themselves of. Prof. C. A. Young, of Princeton was elected President for the ensuing year, and Minneapolis, Minn., was chosen as the next place of meeting, in 1883.

We also learn that the members of the British Association for the Advancement of Science, purpose holding their meeting for 1884, in the city of Montreal. Should they do so, we can bespeak for them a cordial welcome, and the warmest hospitality of the city. In doing so we hope we may be pardoned if we call attention to the facilities afforded by the city of Toronto for meetings of the kind above alluded to. It is favorably situated, easy of access from all parts, only a short distance from Niagara Falls, one of the *eight* wonders of the world, and in the matter of hospitality not second to any other city in the Dominion of Canada.

CANADA MEDICAL ASSOCIATION.

The Canada Medical Association held its fifteenth annual meeting in Toronto, on the 5th, 6th and 7th ult., under the presidency of Dr. Fenwick, of Montreal. A comparatively full report of the proceedings will be found in another column. Owing to the number and variety of the papers, the meeting was divided into two sections—medical and surgical. The papers read were of more than ordinary interest, and occasioned considerable discussion. The continuance of the meeting into the third day was a new feature, and one to be commended. It is a mistake to endeavor to crowd the work of the Association into two days, as has hith-

erto been the case. Much valuable discussion is lost by reason of the haste to have all the papers read before adjourning. The presence of Dr. Carpenter and his interesting address on "Vital Statistics," was very gratifying to the Association, and we hope his remarks may have a beneficial effect upon our Governments in the way of inducing them to give a little more attention and support to matters pertaining to public health. During the intervals between the sessions, many of the members took occasion to visit some of the public institutions of the city, and were much pleased with their visits. In the evening of the second day the Association attended a *conversazione* at the Educational Department, given in their honor by the profession of Toronto, which was largely attended. At the close of the proceedings, the members who remained were invited to visit the Lunatic Asylum, where they were hospitably entertained by Dr. Clarke, the Medical Superintendent. The final decision of the Association to meet at Kingston next year was, we are constrained to believe, a good stroke of policy. Some of the members wished to have it meet in Montreal, but owing to a feeling, with which we have no sympathy whatever, that the Association is being manipulated by McGill professors and their friends, the majority deemed it wiser to meet in Kingston the ensuing year, and the motion was carried. Although the members of the profession in Kingston have hitherto held aloof from the Association, we have every reason to believe they will give it a hearty welcome, and endeavor to make the meeting a success in every sense.

Much credit is due to Dr. Osler, the able Secretary General, for the success of the recent meeting. In point of numbers and general interest, it was the most successful gathering in the history of the Association. We anticipate that under his skilful management the number of members will soon be doubled or even trebled—when it will have so outgrown its present proportions, that it can no longer be said to be under the wing of McGill or any other College.

ONTARIO COUNCIL MATRICULATION.

When the Ontario Medical Council a year or two since, adopted the High School Intermediate, with Latin, as its ordinary matriculation examina-

tion, it was hoped that no changes affecting the examination to any serious extent, were likely to be made. We were accordingly somewhat taken by surprise on learning a few months back, that certain modifications were in contemplation by the Minister of Education, and were likely to be carried out. During the last meeting of the Council several of its members interviewed some of the officials of the Education Office, and learned then, what has since been corroborated, that whatever changes might be brought about, were not likely to affect the examination required by the Council. After the adjournment of the Council the number of enquiries sent by intending medical students to the Registrar, regarding any changes which might be made, necessitated the issuing of a short circular, which was prepared after consultation with the Educational authorities under the direction of the President of the Council. It will be seen from this circular, which we give below, that the subjects included in the examination required, are precisely what they have been all along—and we learn on the highest authority, that the time-table of the Intermediate Examinations will be so arranged as to give every facility to those who take the examination as prescribed—different hours being assigned to the several compulsory subjects.

The following is the circular :—

“The Intermediate Examination referred to on page 10 of the Annual Announcement of the College of Physicians and Surgeons of Ontario for 1882-83; as the ‘Matriculation’ Examination, includes the following subjects, all of which are compulsory :—English Grammar; English Literature; Composition; Dictation; Arithmetic; Algebra and Euclid; History and Geography; Latin. By order, R. A. Pyne, Registrar.”

This does away with any difficulty, and allays all apprehensions, for it fixes the examination at exactly what the Council decided it should be, and lays down a standard for matriculation in medicine in Ontario, as high if not higher, than is required in any country in the world. The Medical Council has very good reason to be proud of the success which has thus far crowned its efforts to advance both the preliminary and professional education of Ontario students, who, wherever they go, take a high standing.

DR. JOHN N. REID.

It is our painful duty to announce the death at the early age of 52 years, of Dr. J. N. Reid, of Thornhill, Ont., of cancer of the tongue. Dr. Reid might be said to be one of the pioneers of the medical profession in his section of the country, having practiced in that locality for upwards of thirty years. He was a graduate of the College of Physicians and Surgeons of New York, and received the Provincial license in 1853. For thirteen years he was professor of physiology in the medical department of Victoria University, known as Rolph's School. He delivered three lectures per week, and was invariably punctual in his engagements with his class, although he had to journey a distance of twenty-four miles on each occasion. After the discontinuance of the medical department, he retired from college work and devoted himself entirely to his practice which was both large and lucrative. His death is greatly regretted by the community in which he labored, as he was much respected for his professional ability and fraternal disposition. He leaves a wife and family to mourn his untimely loss.

ARMY MEDICAL SERVICE.—In no campaign in which British arms have been engaged, have there been more complete and satisfactory arrangements for the care of the sick and wounded, than in the one now happily brought to a successful issue. An Army Hospital Corps of nine hundred men were in the field, distributed at various points where their services were required, and two large steamships, each capable of accommodating 250 patients, were fitted out as hospital ships. A competent surgeon, and staff of assistants and nurses were in charge of each ship. One purpose of the hospital ships was to serve as transports for the sick and wounded to general hospitals at Cyprus and Malta. All the medical officers attached to the staff were supplied with printed instructions in regard to the sanitary precautions necessary to the preservation of the health of the army. There are two diseases prevalent in Egypt to which the soldiers were exposed, viz., ophthalmia, and endemic hæmaturia. The former disease is produced by the scorching rays of the sun reflected from the hot sand, and the latter by drinking water, some of which

contains an organism (*Bilharzia hamatobia*). The troops appear fortunately to have escaped both of these affections. At one time it was feared that a virulent epidemic would result from the frightful massacre which attended the bombardment of Alexandria, owing to the number of dead bodies, human and animal, that were rapidly decomposing in the hot sun; but a sanitary commission of local medical men, who realized the danger, undertook the work of removing the dead bodies, and burying them in trenches outside the city. The water supply was increased, the streets cleaned, and by prompt action the threatened danger was happily averted.

TREATMENT OF OPIUM HABITUÉS.—As there is no home for the treatment of the above-named class of patients in Canada, we take pleasure in calling attention to Dr. J. B. Mattison's institution in Brooklyn, N.Y. Dr. Mattison has had several years' experience in the treatment of opium habits, and has been very successful. His plan of treatment is to withdraw the opium in from five to ten days, avoiding the painful ordeal of immediate abandonment on the one hand, and the tiresome delay of prolonged decrease on the other. Tonics and nervines, together with cheerful social surroundings and personal professional attention, are the agencies used in the management of his patients.

NEW YORK POST-GRADUATE MEDICAL SCHOOL.—We take pleasure in calling attention to the inauguration of a post-graduate school of medicine in the City of New York. The members of the Faculty are all accomplished specialists in the departments respectively assigned them. The establishment of such an institution will be a boon to many medical practitioners by enabling them to acquire a further knowledge of any department of medicine which they may deem essential to their success in practice. We are glad to learn that the success of the new school is already assured.

UNCERTAINTY OF CATGUT LIGATURES.—In a case of Cæsarian section performed by Prof. Spaeth of Vienna, he sewed up the uterine wound with catgut ligatures—Lister's antiseptic chromic acid ligature. The patient died 48 hours after the operation, from peritonitis. At the autopsy the catgut

sutures in the uterus were found untied and straightened out, and the wound open and discharging lochia into the abdominal cavity.

INTERNATIONAL CONGRESS OF HYGIENE.—We have just received from Dr. C. W. Covernton, member of the Ontario Board of Health, a programme of the fourth International Congress of Hygiene, which met in Geneva, Switzerland, from the 4th to the 9th of September. Dr. Covernton was present as a delegate from the Ontario Board of Health.

BRANT COUNTY MEDICAL ASSOCIATION.—The regular quarterly meeting of the above Society took place on the 5th ult., at Paris. The following gentlemen were elected officers for the ensuing year: Dr. Wm. Clarke, (Paris) President; Dr. William T. Harris (Brantford) Vice-President; Dr. W. E. Winskel, (Brantford) Secretary-Treasurer.

MCGILL MEDICAL COLLEGE MONTREAL.—The Medical Faculty of McGill University will celebrate the 50th anniversary of the school by a conversation and dinner on the 4th and 5th inst. The Alumni and friends of the University have been invited and will no doubt respond in great numbers. A successful gathering and pleasant time may be anticipated. We sincerely wish the Faculty every success.

REMOVALS.—Dr. H. C. Burritt, member of the Ontario Medical Council for Newcastle and Trent, Dr. T. G. Holmes of Brussels, and Dr. Rutherford of Chatham have removed to Toronto. Before leaving for Toronto a number of Dr. Burritt's Peterboro' friends met at the residence of his father and presented him with a magnificent epergne, accompanied with an address.

DR. H. H. REEVE has left Minesing, and taken the practice of Dr. Lund, of Churchill, the latter having gone to Guelph.

We have received a letter from Dr. Burns anent the Council matriculation, too late to appear under the head of correspondence. The points raised in the Drs. letter are, however, fully answered in one of our leading articles.

PERSONAL.—Dr. A. Henderson, of Montreal, has returned from a trip to South America.

TO REMOVE THE TASTE OF QUININE.—Weak tartaric acid lemonade taken immediately after the quinine, will almost entirely remove the bitter taste which is complained of by many patients. According to the authority of Dr. Starke, (*Berlin Klin. Wochenschrift*), tartaric acid also favors the absorption of the quinine.

VOMITING DURING ANÆSTHESIA.—Dr. Keith says that he has seen less vomiting since he gave up the use of chloroform as an anæsthetic. With ether, patients will sometimes vomit during the operation; but we no longer have the vomit of chloroform, going on all the first night and next day after the operation.

HEREDITARY LINEAMENTS.—Dr. Oliver Wendell Holmes is credited with the following:—As he was waiting for a prescription, the druggist said: "That is my son, sir, sitting by you; don't you think he looks like me?" "Well, yes," replied the poet, "I think I can see some of your liniments in his face."

"What would you do, sir," asks *Punch*, "if you were called to see a man who had hung himself?" "I would cut him down." "Then what would you do?" "I would cut him up."

L.R.C.P. & S., EDIN.—Drs. Jas. Warburton, of Prince Edward Island, J. McBride, of Toronto, C. W. Belton, of London, passed their final examination and were admitted L.R.C.P. and L.R.C.S., Edin., in July and August last.

APPOINTMENTS.—Dr. Shultz has been appointed a Senator of the Dominion of Canada.

L. Teskey, M.D., M.R.C.S., Eng., has been appointed Assistant Demonstrator of Anatomy in Trinity Medical College, Toronto, and enters upon his duties on the first of October.

Dr. Bell, of Ottawa, has been appointed Surgeon of the Ottawa Field Battery, *vice* Dr. Bentley, who has removed to Winnipeg.

J. W. Oliver, M.D., has been appointed surgeon to the 44th "Norfolk" Battalion, *vice* Dr. F. C. Mewburn retired surgeon-major, and S. H. Glasgow, M.D., has been appointed assistant surgeon.

Dr. W. J. Christie, son of the Hon. Mr. Christie, of Brockville, who has recently been appointed surgeon of Her Majesty's sloop-of-war 'Bittern,' is now on duty with his ship at Alexandria.

Reports of Societies.

ONTARIO BRANCH MEDICAL ASSOCIATION.

A meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on Thursday, August 17th. Dr. Stewart, of Brucefield, presided. Thirty-two members were present.

After the usual preliminaries, Dr. Mackid, of Lucknow, shewed a case of scrofulous disease of the ankle-joint, which elicited a good deal of discussion as to which was conservative surgery in this case, to attempt to save the limb, or amputate in order to preserve the patient's life.

Dr. Yeomans, of Mount Forest, presented a very interesting, but rather obscure case of spinal disease. The patient is 58 years of age, previously healthy. A year ago last April he had an attack of pleuritis, followed by loss of power in the upper extremities; subsequently symptoms of paralysis occurred in the lower extremities. He cannot walk without crutches, cannot stand or walk with his eyes shut. His powers of co-ordination are at fault. No feeling of constriction around the body. He feels as if walking on a very rough or uneven surface. Patellar tendon-reflex present; no pain in spinal column. Any smooth article appears rough to the sense of touch in both hands. His habits of life have always been good. Electricity produces increased irritability.

Dr. Stewart, of Palmerston, shewed a case of infantile paralysis, having two separate lesions, the right arm and left leg being paralyzed. Also a case of neuromatous tumor of the ulnar nerve, accompanied by severe pain, no doubt resulting from injury to the nerve as a complication of a compound fracture of the humerus, which he had received.

Dr. Burgess, of Listowel, read a very instructive paper on "The pulse variations and their significance," which was well received.

Dr. Stewart, of Brucefield, reported a case of abdominal section for fibro-cystic tumor of the uterus, on which he operated on the 28th of June last. The patient was a young woman, 18 years of age. Tumor was first noticed three years ago. Abdominal incision was 10 inches long; pedicle divided in two parts, secured by carbolized silk and dropped back into the abdominal cavity. There were

no adhesions. A drainage tube was left at the lower part of the wound. Thorough antiseptic precautions (Listerism) were observed throughout. Had been mistaken for an ovarian tumor. Complete recovery. Tumor weighed twelve pounds, which was shown to the meeting.

Dr. Standish, of Palmerston, opened a discussion on the nature and treatment of diphtheria, in which the following gentlemen took part: Drs. Macdonald, Yeomans, Jones, McNaughton, Cowan, Gunn, Clapp, Philp, Bethune, Collinge and Halsted.

The following resolutions were passed:—That two meetings be held each year, instead of three as at present, each having three sessions. That the next meeting be held in Palmerston, on the first Tuesday of February next, and that Drs. Burgess and Graham prepare by-laws for the approval of the branch at next meeting.

The following gentlemen were appointed by the President to prepare papers for next meeting:—Drs. Gunn, Cowan, Macdonald and Holmes.

Books and Pamphlets.

A TREATISE ON THE PHYSIOLOGICAL AND THERAPEUTICAL ACTION OF SULPHATE OF QUININE. By Otis Frederick Mason, M.D., Prof. of Physiology, etc., in the Medical College of Virginia. Philadelphia: J. B. Lippincott & Co.

This work though not large, is a most exhaustive one on the subject. The author states that although this remedy has been in use nearly two-thirds of a century, yet there is, perhaps, no agent concerning whose properties such opposite opinions are held, or which has elicited more discussion. He gives an interesting account of its discovery and first introduction into practice. He then gives in detail: 1st, its action on animals; 2nd, its action on man in health; and 3rd, its effects on the human organism and disease. This is followed by a chapter upon the therapeutic uses of quinine, and the author concludes with a short chapter on its *modus operandi*. Among the many diseases in which this remedy is used, he speaks very confidently of its great value in cholera infantum, and cerebro-spinal meningitis. His theory of its *modus operandi* may be summed up as follows, viz.: That it contributes to the removal of disease by rendering the nervous system insensible

to the action of the morbid causes of those maladies in which its employment has been proven by experience to be efficacious.

A MANUAL OF HYPODERMATIC MEDICATION; the treatment of diseases by the Hypodermatic method. By Roberts Bartholow, M.A., M.D., LL.D., Prof. of Materia Medica and Therapeutics in Jefferson Medical College. Fourth Ed. Philadelphia: J. B. Lippincott & Co. Toronto: Willing & Williamson.

In this work the author deals with the history of hypodermic medication, the method, the syringe, the solution, the remedies and their action, in short, everything in this connection that is likely to be of service to his readers. This little volume of 350 pages is the fourth edition, and has undergone careful revision by the author. Many changes have been made and considerable new matter has been added to the work. The author has ventured to substitute the term *hypodermatic* for the familiar word *hypodermic*. It will be found very difficult, we apprehend, to introduce the new term, the other having been so long in use. We cordially commend the work to our readers.

POCKET-BOOK OF MEDICINE AND PERPETUAL VISITING LIST. By D. Tod Gilliam, M.D., Columbus, Ohio.

This Visiting List comes as near perfection as any work of the kind we have yet seen. It comprises a compendium of diseases and their treatment, poisons and their antidotes, urinalysis, table of doses, many elegant prescriptions, etc. The call list is perpetual, and may be used at any time or for any year, either as a weekly or a monthly record, to suit the taste or convenience of the physician. The sheets of the call list are movable and may be replaced by new ones every week or month as required, or when posted into the ledger. The list is very compact, of most convenient size and handsomely bound in morocco. We heartily recommend it to our readers.

LABOR AMONG PRIMITIVE PEOPLE BY GEORGE J. ENGELMANN, A.M., M.D., Prof. of Obstetrics, Post-Graduate School of Missouri Medical College, Fifty-six Illustrations. St. Louis: J. H. Chambers & Co.

The author has devoted a good deal of time to the study of the obstetric customs among the primitive nations, and the work before us is the result of his *labor*. The subject is ethnological rather

than medical, but is nevertheless very interesting to a professional reader. The first part of the work is devoted to a description of the posture in labor; the second to the management of the third stage, and the third to the time of pregnancy, labor and childbed, and concludes with sketches of characteristic labor scenes among the yellow, black, and red races.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, by Louis A. Duhring, M.D., Prof. of Diseases of the Skin in the University of Pennsylvania. Third edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co.

We are pleased to announce the receipt of a new edition of this excellent work on diseases of the skin. The work has undergone careful revision. The chapter on the anatomy and physiology of the skin has been re-written and elaborated in accordance with recent studies in microscopic anatomy. Several new illustrations have been added, and the work as a whole has been considerably enlarged. The treatment of the various diseases has been brought up to the very latest improvements. We have very great pleasure in bearing our testimony to the value of the work as a text book on this interesting subject.

ESSENTIALS OF VACCINATION, by W. A. Hardaway, M.D., Prof. of Diseases of the skin in the Post-Graduate Faculty of the Missouri Medical College, St. Louis, Mo. Chicago: Jansen McClurg & Co. Price \$1.00.

This is a careful compilation of the more essential facts relating to this important subject, and as such will prove acceptable to the profession and also to the general reader. The author treats of the history of vaccination, nature of vaccinia, re-vaccination, the merits of different kinds of vaccine virus, methods of obtaining and storing it, and concludes with an examination of the objections to vaccination.

WHAT TO DO IN CASES OF POISONING by William Murrell, M.D., M.R.C.P., Lond., Lecturer on Materia Medica, &c., at the Westminster Hospital, second edition. Detroit: Geo. S. Davis, Medical Publisher.

The above will be found a most useful guide in an emergency. It is very small, and may be carried in the vest pocket and consulted without a moment's delay.

THE COMPEND OF ANATOMY FOR USE IN THE DISSECTING ROOM, AND IN PREPARING FOR EXAMINATIONS, by John B. Roberts, M.A., M.D., Philadelphia: C. C. Roberts & Co.

THE VEST-POCKET ANATOMIST, (founded upon Grey,) by C. Henri Leonard, M.A., M.D., Detroit, Mich. Eleventh revised edition. Price 75 cts.

The above works are similar in character and will be found useful as aids to the memory in dissecting, or on the eve of an examination—but should not be used in any way as text-books on the subject by the student.

INHALATION IN PHTHISIS.—A few drops of the following mixture placed upon the sponge of McKenzie's inhaler, and applied to the mouth and nose for several hours daily, will be found very serviceable in the treatment of this disease:—Acid carbol. ʒijss.; Tinc. Iodi, Ethereal, ʒijj.; Creasote ʒjss.; Spts. Vini, Rect. *ad* ʒj—M.

ABSENCE OF UMBILICAL CORD.—Dr. Kinne of Ypsilanti, Mich., reports in the Detroit *Clinic* a case occurring in his practice in which a woman gave birth to a six-month's foetus still-born. It was enclosed in a long and narrow amniotic sac to which the placenta was attached in a sessile manner.

"What is the action of disinfectants?" was asked of a medical student. "They smell so bad that people open the door and fresh air gets in," was the reply.

Births, Marriages and Deaths.

On the 18th ult., Dr. J. B. Bond, of Yarmouth, N.S., in the 80th year of his age.

In Halifax, N.S., on the 11th of June, B. Gardner, Page M.R.C.S., Eng., in the 72nd year of his age.

At Thornhill, Ont., on the 19th ult., of cancer of the tongue, Dr. J. N. Reid, aged 52 years.

At St. Benoit, Que., on the 25th ult., Hon. Dr. Dumouchel, aged 72 years.

In Galt, Ont., on the 23rd ult., Dr. Samuel Richardson, aged 74 years.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

PLACENTA PRÆVIA, CHLOROFORM POISONING AND PEURPERAL SEPTICÆMIA.

BY G. H. COBURN, M.D., FREDERICTON, N. B.

Was called May 21st at 3 a.m., to see Mrs. E. P—. She had had sharp pains at intervals of fifteen minutes, for some hours, and quite a show of bright blood. Os uteri not dilated enough to admit the finger. Ordered rest in bed. No more pain nor hemorrhage until evening, when pains came on feebly for a few hours, accompanied by a slight show, os not dilating appreciably. All was now quiet until evening of 22nd, when pain and hemorrhage re-commenced. I was not informed of this, and she lost, through the night, 6 or 8 oz. of blood. On the morning of Tuesday, 23rd, I found os the size of a quarter dollar, a vortex presentation could be made out, and an edge of the placenta extending half way across the os uteri could be distinctly felt. The pains were not severe nor frequent, but with each a flow of blood occurred. I now separated the placenta from the uterus as far as my finger could reach, and ruptured the membranes, with the affect of increasing uterine contraction, and stopping the hemorrhage. Pains continued during the day, the os slowly dilating as it did so. I extended the separation of placenta and no blood was lost. At 11 p.m. the os was pretty well dilated, and as the patient was much exhausted and the *vis a tergo* poor, I decided to apply the forceps and deliver. Anæsthesia was produced by chloroform, and the towel given to an assistant. The first blade was adjusted without difficulty, but while applying the second the hemorrhage came on to an alarming extent. I supposed the instrument had separated the placenta, and, the patient being profoundly anæsthetized,

the uterus failing to contract, allowed the flow to come on. The forceps failing to lock readily, owing to the oblique position of the head, and the hemorrhage being profuse, I decided to deliver by version.

I introduced my hand into the uterine cavity, (I may here state that at no time had my hands touched the genital organs until they were soaked in a solution of carbolic acid), and reached the feet without difficulty. Some trouble was experienced in turning as the liquor amnii had been evacuated a long time. I had just brought the feet and legs into the vagina, the head not yet having reached the fundus, when chancing to look up, I, to my horror, saw that my patient was in extreme danger from the chloroform. Before I could reach her side, the breathing had stopped, and the pulse at the wrist was imperceptible. Artificial respiration was at once begun, and I injected hypodermically a syringe full of alcohol, neither whiskey nor brandy being at hand. For a short time I feared my efforts would be fruitless, but after two or three minutes perseverance and the aid of another injection, (of brandy this time), she gave a gasp or two, and respiration was established. Not caring to trust the anæsthetic to unskilled hands any longer, I sent for a friend who took charge of it, ether being substituted for chloroform. During this delay some blood had been lost, not very much, however. Upon examination I found that the feet had slipped up into the uterus again, necessitating the introduction of my hand. Version and delivery were now accomplished in a few moments. The child was not breathing, but a few smart slaps soon set it to crying lustily. Not wishing the patient to lose any more blood, ergot was given hypodermically, and in a few moments I delivered the placenta and got good contraction. Placenta and membranes were examined and found apparently intact. Ordered vaginal injections of carbolized water, 1 to 30, three times a day, and carbolized oil 1 to 10 on napkins. Some swelling of external organs followed, which subsided in twenty-four hours. Catheter used for two days. All went on well without an ache, pain or elevation of temperature until Saturday morning (fourth day,) when the temperature was found to be 102° F. Thought this might be due to the establishment of the lacteal secretion. On this evening there was a slight chilly sensation, but on Sunday morning

(fifth day,) the temperature was again normal, breasts full of milk, and patient felt well. At noon visit I was surprised to find the temperature 104.6° F. Examined napkins and found them smelling badly; no tenderness over uterus, and milk flowing freely. Thinking that the carbolic injections might not have been thoroughly used, I, myself, washed out the vagina. Prescribed quinine, ten grains to be taken daily in divided doses. At 9 p.m. I was gratified to find the temperature normal. Quinine was discontinued, temperature now kept below 99° F., and everything was in all respects normal until Thursday (9th day.) On this day I gave her permission to sit up for an hour in an easy chair beside the bed. She had not been up ten minutes when she was seized with an agonizing pain in the right utero-ovarian region. Brandy was given, and hot applications made. Upon my arrival I injected in the arm one-third gr. morphine and 1.120 gr. atropia. Pain was soon relieved, but much tenderness was left at lower right part of abdomen. Pulse 120, temperature 103° F. Hot applications continued and quinine recommenced, morphine to be used p. r. n. if pain returns. June 2nd, 9 a.m., pulse 100, temperature 101° F. Tenderness not so great; no morphine required during the night. 12 m., temperature 102° F.; much thirst and distaste for food, but no vomiting; tenderness decreasing, but feels a bearing down upon attempting to sit up in bed. There is evidently septicæmia, and more or less pelvic peritonitis. Quinine continued, and to have as much nourishing food as she will take. Lochia about stopped, but ordered carbolic injections to be kept up. 6 p.m., temperature 103° F. Prescribed two minims tinct. aconit. rad. every four hours. No diminution of lacteal secretion.

June 3rd, 9 a.m.—At one o'clock this morning she had a chill, followed by profuse perspiration, which continued several hours; pulse 96, temperature 99.5° F. Ordered two teaspoonfuls of brandy in milk every two hours; abdominal tenderness nearly gone. 12.30 p.m., temperature 99° F., pulse 90. Takes a fair amount of nourishment, but does not crave it. Aconite not to be given so frequently; pulse 88, temperature 98.5° F.; feels better. Had a bowl of chicken broth for dinner, also a few strawberries. 8 p.m., pulse 95, temperature 100° F. Feels quite comfortable;

food tastes natural again, and tenderness only felt on deep pressure. Gave a dose of aconite. 10 p.m., pulse 90, temperature 101° F. Had a good stool after enema; no pain nor chills; to have aconite at 11.30 p.m.

4th—9.30 a.m.—Feels much better this morning, and looks brighter; pulse 85, full and strong; temperature 100° F. Did not sleep very much, but was not restless; no soreness nor pain. Nurse said, that in washing out the vagina this morning a shred of membrane about an inch long, came away. Gave a dose of aconite. 1.30 p.m.—Pulse 90, temperature 101.5° F.; has had quite a sleep. A little bloody discharge came on to-day, smelling perfectly sweet. Gave a dose of aconite, and ordered another at 6 p.m. 8 p.m.—Pulse 90, temperature 102° F. Still patient said she did not feel very uncomfortable. Aconite to be given at 10 p.m.; quinine and brandy as usual.

5th—9.30 a.m.—Did not rest very well; felt very hot about midnight, and perspired freely after it; was hungry for breakfast and enjoyed it; milk flowing in abundance; legs ache badly; pulse 80, temperature 100° F. As pulse was down, and not full, I discontinued aconite for the present. A slight discharge continues, which smells sweet; no soreness nor pain; vaginal injections now to be used twice a day; food relished, and a fair quantity taken. 2 p.m.—Has had a good sleep and feels well, but pulse and temperature still keep up, the former being 100 and the latter 102° F. As all along the range of temperature had been higher than the symptoms would indicate, I had my thermometer compared, and found it to be correct. Her strength keeps up wonderfully. Ordered a dose of aconite mixture. 7 p.m.—Pulse 92, temperature 102° F. Gave aconite. 9 p.m.—Pulse 88, temperature dropped to 100.5° F. No vaginal discharge; complains of a little pain after urinating. Ordered a teaspoonful of sweet spirits of nitre. As patient did not sleep much last night, I prescribed 10 grains chloral and 12 grains bromide of potassium, to be repeated in an hour if sleep be not produced.

6th.—9 a.m.—Slept well without any chloral, and feels much refreshed; good appetite; still some pain after passing urine; to repeat nitre. Pulse 95, temperature 98.5° F. 2.30 p.m.—Pulse 95, temperature 100° F. Relished dinner of chicken, baked potatoes and prunes. 9 p.m.—

Feels tired and worn ; pulse 104, temperature up again to 103° F. Possibly I allowed too hearty a dinner. Gave aconite.

7th.—9 a.m.—Pulse 90, temperature 99.5° F. Slept well last night ; good appetite and feels well. A small shred of membrane came away again to-day, while washing the vagina. If the temperature rises again to-day I propose to wash out uterine cavity. 11.15 a.m.—Temperature 98.5° F. Gave permission to move from the bed to a lounge, for a short time. Bowels moved by enema. 1.30 p.m.—Was lifted from bed to the lounge, and enjoyed the change. Pulse 100, temperature 101° F. 3 p.m.—Pulse 104, temperature 102° F. I gently introduced a catheter through the os uteri, and slowly injected two pints of carbolized water, 1 to 30. No pain was caused ; water flowed back very slightly stained. 6 p.m.—Sent for. She had had a slight chill ; pulse 108, temperature 104.5° F. Frontal headache. Gave an extra dose of quinine, and ordered aconite every half hour, for the present. 7.30 p.m.—Still burning hot, and headache severe ; pulse 116, temperature 104.5° F. Thinking it well to have the responsibility shared, I suggested a consultation, and Dr. Atherton saw the case with me at 8 p.m. Temperature had by this time dropped to 103.8° F. Dr. A. could discover no fixation of the uterus, nor evidence of any local trouble whatever. Hoping that the high temperature might have been partly caused by the very free use of carbolic acid, we decided to suspend the vaginal washings. It hardly seems possible, however, that such can be the case, for the acid has been constantly used while the fluctuations of temperature have been great, it having been for many days normal ; moreover, the urine has shown no sign of carbolic acid poisoning. Upon Dr. A's suggestion the aconite was discontinued, the dose of quinine reduced to one grain three times a day, and the diet somewhat lowered. 11 p.m.—Has had another chill, lasting half an hour. Pulse 120, temperature 105° F. Gave a dose of nitre. To have milk to drink throughout the night.

8th, 3 a.m.—Sent for ; had not slept any, chilly sensations down arms and legs every few moments, much headache and very tired. Pulse 120 ; temp. 105° F. Gave a dose of chloral and bromide mixture with directions to repeat if necessary. 8.30 a.m.—Slept about two hours after a second dose of chloral. No more chilly feelings, but perspired

profusely. Pulse 120 ; temp. 104.2° F. Feels very worn and tired. No diminution of lacteal secretion. 10.30 a.m.—Pulse 104, temp. 103° F. Has been dozing most of the time since. Takes plenty of milk ; to have brandy and egg, as usual, once a day. 1 p.m.—Still very drowsy, no chills ; pulse 106, temp. 100° F. Prescribed potass. citratis. gr. vi., tinct. opii. camph. m. v., spts. æther. nit. 3ss., to be taken every four hours ; not so much pain after micturition. 2.30 p.m.—Pulse 100, temp. 100° F. 5 p.m.—Pulse 90, temp. 100-2° F. 7.45 p.m.—Just having a chill, pulse 108, temp. 101° F. Feels rather despondent at having chills again. Gave an extra dose of brandy, and used hot bottles, etc. 8.30 p.m.—Chill lasted half an hour, pulse 112, temp. 102-4° F. 11 p.m.—Has had another chilly or rather creepy sensation, lasting nearly an hour. Pulse 120, temp. 104-2° F. To have chloral if necessary.

9th 8.45 a.m.—A better night. Several slight chills, but did not feel as hot after them. Slept several hours without chloral. Pulse 110, temp. 102° F. Some little discharge again this morning, but it is perfectly sweet. NOTE—It is evident that the carbolic acid, had no part in producing the symptoms. Her condition is bad, but not as desperate as the range of temperature would indicate. The question seems to have resolved itself into one of keeping the patient alive, until the poison has exhausted its virulence. 1.30 p.m.—Temp. 102° F. Complains of a pain in right side of chest, upon deep inspiration. Mustard applied and ¼ gr. morphia given. 8.30 p.m.—Pain in side better, temp. 104° F. ; no chills, vaginal discharge ceased. 10 p.m.—Pulse 120, temp. 103.8° F., pain troublesome.

10th, 9.30 a.m.—Slept well, until 3 a.m. when pain in side grew very severe. Pulse 108, temp. 103.5° F. Pleurisy seems probable, though I cannot detect any friction sounds. Ordered hot applications to side, and gave ¼ gr. morphia and 1-150 gr. atropia. 1 p.m.—Pulse 100, temp. 102. Pain easier, no cough. 6.30 p.m.—Pulse 112, temp. 103.5° F. Has had one or two fits of coughing without expectoration. Friction sounds now detected. Hot applications continued, opiates p. r. n. 9.30 p.m.—Temp. 103° F. ; cough troublesome ; to have flaxseed tea *ad lib.* Takes plenty of nourishment.

11th, 9.30 a.m. Better, slept nearly all night,

cough looser and pain much less severe; pulse 106, temp. 100.5° F. No chills for 48 hours. 2 p.m.—A very fair day, but little pain, expectorates quite freely a frothy mucus, tinged once or twice, with blood. It is probable, that some pneumonia exists, in connection with the pleurisy, pulse 112, temp. 102° F. As a vaginal discharge again showed itself to day I ordered an injection of carbolized water. 5.30 p.m.—Pulse 110, temp. 101.8° F. 8.30 p.m.—Pulse 98, temp. 100.5° F. Temperature has not been as low for three days. 10.30 p.m.—Pulse 106, temp. 102.5° F.

12th, 9 a.m.—Slept fairly well, but had two or three hard coughing spells, pulse 108, temp. 102° F. Ordered Morph. Sulph. grs. ij. Spts. Chloroformi, ʒij. Vin. Xerici. ad ʒij. M. Sig. ʒi. p. r. n. 12 m.—Pulse 108, temp. 102° F. Cough much easier. 6 p.m.—Pulse 104, temp. 101° F. 10 p.m.—Pulse 104, temp. 102° F.

13th, 10 a.m.—Pulse 96, temp. 100° F. Babe was fretful and patient did not rest well, one or two hard spells of coughing this morning. Port wine substituted for brandy, only a small quantity taken. 12.30 p.m.—Temp. 100.5° F. Expectoration more free, still a trace of blood now and then. 9.30 p.m.—Pulse 100, temp. 101° F. Has coughed but little.

14th, 10 a.m.—A good night, with cough decidedly better; pulse 96, temp. 99.5° F.

15th, 11 a.m.—Pulse 100, temp. 100.6° F. Has just been informed of the expected arrival of her mother from Toronto; this has likely run the temperature up, symptoms otherwise improving. An enema was given this morning followed by a good motion. 2.30 p.m.—Pulse 96, temp. 98.5° F. 9 p.m.—Pulse 96, temp. 98.5° F. Has coughed scarcely any, and feels well.

16th, 10.30 a.m.—Pulse 96, temp. 100° F. 2.30 p.m.—Temp. 100° F. More cough to-day and feels tired. Examined chest, no friction sounds, no effusion; rough breathing over upper portion of right lung, and absence of sounds, with some dullness over lower lobe indicating consolidation. 8.30 p.m.—Pulse 92, temp. 100° F.

17th, 9 a.m.—Temp. 98.5° F. Slept fairly well, cough easier. 3 p.m.—Temp. 99° F. 9.30 p.m.—Cough troublesome, and temp. up again to 102° F. I fear some new complication.

18th, 9 a.m.—Slept well, with but little cough; pulse 90, temp. 98.5° F. Perhaps the high tem-

perature of last night was due to an error of diet. 2 p.m.—Pulse 80, temp. 98.5° F. Allowed to lie on lounge a few hours. 8.30 p.m.—Pulse 88, temp. 101° F. Can discover no extension of lung trouble. Feels very well, but strength gains very slowly; ordered stimulants to be used more freely.

19th, 9 a.m.—Pulse 88, temp. 98.5° F. Prescribed Elix. Calisaya, Iron and Bismuth, (Wyeth). A teaspoonful three times a day.

20th, 10 a.m.—Temp. 98.5° F. Cough improving very much and feels better in every way.

21st, 10 a.m.—Temp. 98.5° F. From this time the temperature never rose above the normal point, and improvement was constant, cough grew less and less, chest sounds cleared up and became normal.

July 6th—Went out for a drive, and on this day bowels first moved spontaneously. Toward the last of July, she went on a visit to relations in Toronto. At present writing (Sept. 13th) there is no cough, she has regained her flesh, and is, to all intents and purposes as well as ever.

REMARKS.—The points worthy of notice seem to me to be the following; and this paper has already reached such proportions, that I can only indicate them.

1st. The success attained in stopping the hæmorrhage, by separating the placenta as the os uteri dilated.

2nd. The, almost fatal, accident from chloroform, during an accouchement.

3rd. The sudden rise of temperature on the 4th and 5th days, followed by an absolutely normal temperature until the 9th day. I cannot doubt that the first rise of temperature was due to blood poisoning, and it would seem as if the second must have been produced by a fresh dose. I attributed it, whether correctly or not, to an escape of septic fluid through the right Fallopian tube, upon the patient first assuming the erect position.

4th. The effect of the aconite. A reference to the text will show that its administration was always followed by reduction of the pulse rate, and in most instances this was accompanied by a corresponding fall of temperature. In suitable cases, I am inclined to think it a valuable drug.

5th. The fact that the constitutional symptoms were not as severe as the high temperature would indicate.

6th. The occurrence of pleurisy on the seventeenth day. As there was no exposure, this was looked upon as a result of the septic poisoning.

DISLOCATION AT THE ELBOW OF BOTH RADIUS AND ULNA BACKWARDS, SUCCESSFULLY REDUCED AFTER THE LAPSE OF SIX WEEKS.*

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This case was admitted to the Kingston Hospital on the 7th of January last, suffering from a backward dislocation of the bones of the forearm at the elbow-joint, produced by a fall which he received over five weeks previous to that time. He was a large, muscular, well-developed man of about 25 years of age, and had every appearance of robust health.

Symptoms on admission.—The usual symptoms were present on admission: His arm was nearly straight, there being only slight flexion at the elbow; there were shortening of the forearm, projection of the trochlea in front and olecranon behind, the hand occupying a position between pronation and supination, but inclining more to the latter, and widening of the distance between the condyles of the humerus and the head of the olecranon. There was still considerable swelling about the elbow, and complete immobility of the joint.

By careful examination I diagnosed dislocation of both bones of the forearm backwards; but after having satisfied myself of the nature of the injury, the more difficult question arose, namely, Can I reduce it after the lapse of nearly six weeks?

Gross states that he has met with many cases where all efforts to reduce proved unavailing after the third week, and sometimes after the second; and he further states that three weeks' duration always renders the reduction of this dislocation very difficult, although he has met with some cases that have been reduced after two months' standing.

Sir Astley Cooper is said to have succeeded in reducing this dislocation after three months; Malgaigne at three and a-half; Blackman, Brainard and Westmoreland after five months' standing, and Gerdy and Drake even at six. But such cases as these are extremely rare, and the danger of injuries to the parts, followed by violent inflammation, suppuration, and gangrene, is too great to justify a

surgeon in making violent and protracted efforts to reduce, where the dislocation has been of several months' duration. Velpeau is reported to have lost a case from this cause.

In cases where reduction seems to be impossible, breaking off the olecranon process by forcible flexion of the arm has been suggested, and there is no doubt that such a measure is perfectly justifiable when we consider how completely useless a straight or nearly straight arm is, and how useful one in a semi-flexed position may be, although the joint may be entirely ankylosed. Re-section of the joint would scarcely seem necessary, except in cases of old standing, when other methods of procedure have all proved unavailing, as in a case which I have in my mind at present.

As my patient was a healthy young man, and stood in need of a useful arm, I decided after due consideration to attempt reduction. The methods of reduction recommended and practised, as you all know, are somewhat various in their modes of execution, but precisely the same in principle; that is, they aim at the same results, namely, to pull the ulna from the articular end of the humerus and to lift this latter backwards over the coronoid process into its sigmoid cavity again. Placing the operator's knee in the bend of the elbow and bending the forearm around it, while pressure downwards is made with the knee; counter-extending by a band around the patient's chest while extension is made by an assistant; bending the arm around a bed-post while the surgeon himself makes extension by pulling upon the hand; placing the heel instead of the knee in the bend of the elbow and with that for a fulcrum attempting flexion and extension by the surgeon himself; and by using pulleys with a band around the chest if the patient is very strong and muscular; or finally, by adopting the method practised in this case with success, and which I shall here detail: The patient was placed upon the operating table and brought fully under the influence of chloroform. He was then placed near the edge of the table, and turned partially upon his side, so that the arm hung free beyond the edge of the table. The middle and upper part of the humerus and the patient's body were grasped and firmly held by two strong assistants, while the hand and lower part of the forearm were seized upon and held by two other assistants. Equable and persistent traction was made, and pressure

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exercised upon the upper part of the forearm in such a manner as would tend to lift it away from the trochlear surface of the humerus, at the same time that extension was being made. I also made pressure downwards and forwards upon the projecting olecranon process with one hand, while with the other I grasped the forearm near the elbow to assist in pulling the ulna from the humerus, and also to direct, at the proper time, the necessary flexion of the arm. After a few minutes of steady effort in the manner here stated, I distinctly felt the joint begin to yield and the bones to separate, the act being accompanied by a sensation as of something tearing. I then directed the assistants who held the forearm and hand to slowly and cautiously flex the limb, without relaxing their hold or lessening the traction they were making upon it. I also continued to bear downwards and forwards upon the olecranon and the upper part of the forearm close to the joint. As flexion was gradually produced, I had the pleasing satisfaction of feeling the olecranon glide forwards, and the trochlea of the humerus assume its wonted position in the vacant sigmoid cavity. The limb was then flexed until the fingers of that hand were placed upon the top of the opposite shoulder; and after extending and flexing it several times to make sure that any new adhesion would be broken up, and that the bones were in proper position, the arm was flexed at a right angle, put up in an adjustable elbow splint well padded, and suspended high up across the breast in a sling.

For the first twenty-four hours there was severe pain, which required to be relieved by morphia; there was also considerable swelling and redness, to control which we kept a lotion of acetate of lead and laudanum constantly applied. All the urgent symptoms, however, gradually abated and in a few days the patient was able to walk about the wards of the hospital, apparently free from suffering, and greatly pleased at the new position in which he found his arm. At the end of eight days we began to make passive motion of the joint, which yielded without difficulty, though, of course, not without some pain.

On the 1st of February, thinking himself well enough, and being able to move the joint to some extent voluntarily, he left the hospital, since which time I have heard nothing from him.

In calling attention to the report of this case, I

do not expect to instruct my brethren in the profession in the diagnosis and treatment of dislocations of the elbow-joint, nor have I entered minutely into details; for I feel that, to assume the position of an authority before so large and learned a body as this is, would be to tread upon dangerous ground, and to reiterate facts with which you are all perfectly well acquainted. Nevertheless, there are some thoughts suggested by the subject which it may not be amiss to discuss, and which might be profitably pondered over by some of the younger members of our profession.

First, then, as regards diagnosis.—The diagnosis of injuries of the elbow-joint are admittedly difficult. The complicated nature of the joint, the number of epiphyses about it which may be separated from their bones, especially in childhood, and the swelling which generally so quickly supervenes, all conspire to obscure the real nature of the injury, and to leave the inexperienced surgeon in doubt as to the character of the lesion before him, and hence unable to pursue the proper line of treatment.

There is no class of cases in which an accurate knowledge of anatomy is so requisite as in dislocations, and none which puts the real knowledge and skill of the surgeon to so crucial a test; and it is a thorough acquaintance with the anatomy of the joints—bones, ligaments, and muscles surrounding them—which alone can qualify the practitioner to become successful in this department of surgery. Several times has it been my lot to see dislocation of the head of the humerus into the axilla, treated as a sprain or bruise by an M.D. until the time for any hope of reduction had past; and the case here reported is the third one of the kind that has come under my care in which treatment by another surgeon had been unavailing; and doubtless many of you, gentlemen, have had similar experiences. This man had been for the five weeks previous to his coming to the hospital, that is, from the receipt of his injury, under the care of another medical man, who not only honestly stated that he could not remedy the deformity of the man's arm, but that he could not satisfactorily decide upon the real nature of the injury. Another case occurs to my mind at the present, which will serve to illustrate the ease with which a mistake may be made, and the effect which such may have upon the reputation of the surgeon.

About eight years ago a little girl *æt.* 10, but who is now a young lady with as fine a pair of arms as one could wish to see, was brought to my surgery for the purpose of having me examine her elbow, which had been hurt three weeks previously. On examination I found the characteristic symptoms of backward dislocation of radius and ulna—partially flexed arm, hand between pronation and supination but inclining to the latter, prominence of the trochlea in front and shortening of the forearm, projection of the olecranon process backwards, and increase of the distance between the internal condyle of the humerus and the tip of the olecranon. The arm was still considerably swelled, but yet all the necessary diagnostic points could be made out. I explained the nature of the case to her parents, and with their consent and assistance chloroformed the child, and reduced the dislocation without the least difficulty. The arm was properly bandaged and in a few weeks all traces of the injury had disappeared. Now the medical man who had charge of the case before I saw it, had pronounced it a sprain and had been treating it with fomentations, liniments, etc., to the damage of the child and the great vexation of her parents. I explained to them the difficulty frequently experienced in ascertaining the exact nature and seat of injuries about joints; but although they listened to me with attention, and no doubt believed me, yet this could not take away their feeling of distrust, yea, almost enmity, towards the other medical man; for they thought that if I could detect the true nature of the injury and remedy it so quickly, the gentleman they had been employing could not be up to the mark as a skilful and reliable surgeon. The consequence was, that he lost not only the practice of that family, but of all the families in the neighborhood which they could influence.

But knowing the difficulties which beset this and some other injuries and dislocations, we should protect each other as far as possible; and any one of us when in doubt should not hesitate to seek the opinion of some competent professional brother. To set this matter before you in a most elegant and emphatic manner, permit me to quote from Skey: "A surgeon is justly responsible to society for the entire restoration of *many* forms of injury to their condition of health, provided no extreme or unusual difficulty exists in the nature of the accident, or arises in the course of treatment, and

is justly chargeable with the consequences of failure; and the records of the law unhappily teem with examples of a compulsory retribution as the award of ignorance or neglect. But in the case now under consideration which sets at naught the knowledge and the foresight of the most experienced, a surgeon can only render himself responsible for the result by the assumption of power which he does not possess, or by volunteering an unguarded pledge of his ability to restore the joint to its former condition of health. This is obviated by a candid avowal of the difficulties of the case, and his willingness to avail himself of the co-operation of others, who can at least lighten his burden by sharing his responsibility."

Secondly, in looking at the *legal aspect* of joint injuries, we should never forget that the elbow-joint offers one of those intricate problems which are too often presented to the surgeon for solution.

In the case of *Hoban v. Parker*, tried twice at the Kingston assizes (the last time in September, 1881), the patient in some kind of a row received a severe kick upon the elbow-joint. The case was diagnosed by the attending surgeon to be a fracture, and treated as such; for some reason, however, gangrene ensued, and the result was that the arm had to be amputated above the elbow. Upon examination of the joint after amputation, the bones entering into it were found to be entire. The plea set up by the plaintiff was ignorance on the part of the surgeon in not detecting the true nature of the injury, and improper treatment by bandaging the limb too tightly. After two trials at court, which must have been a source of great expense and vexation to the surgeon, the jury disagreed as to a verdict, and the case was dismissed; but another emphatic lesson was taught thereby, of the necessity of knowledge and care in elbow-joint injuries, and of the propriety of calling in another surgeon, at least, to share the responsibility in all doubtful cases.

We may here again quote the impressive words of Skey: "The penalties of the law are justly enforced on those who play a single-handed game, by which they deprive their patients of the advantages to be derived from the experience of others; whereas they should rely on the well-known adage, which under no circumstances is more pertinent than when applied to a medical man placed in this critical position, that 'union is strength.'"

Thirdly, we may notice the causes that render this dislocation so difficult of reduction after a few weeks' standing.

Dr. Samuel D. Gross, in the fifth edition of his masterly work on surgery, states that he was not prepared to assign any reason why a luxation that is so easily rectified if properly managed in its earlier stages should so soon become utterly irreducible, resisting and defying all the best directed efforts of the surgeon when allowed to remain for a few weeks.

It seems to me, however, that if we carefully consider the construction of the elbow-joint, and duly appreciate all the displacements that occur in backward dislocation of both bones of the forearm, we cannot be at a loss to assign a good and sufficient reason for the quickness with which this luxation becomes irreducible. Of the four ligaments surrounding the joint, the anterior would in all probability be torn loose from the coronoid process of the ulna; the posterior being loose might escape injury, but on account of its thinness some of its fibres might be broken through; the internal lateral ligament would have its posterior portion which is attached to the inner margin of the olecranon torn through, and the external lateral ligament would suffer laceration in some of its anterior fibres. As regards the muscles, the supinator brevis would have some of its upper fibres torn through, and the remainder put upon the stretch, to be accommodated by supination of the hand. The anconeus would be relaxed, but from its shortness and the projection of the ulna backwards, might be more or less lacerated; the powerful triceps muscle would be relaxed from the approximation of its points of attachment. All the remaining muscles of the forearm, both anterior and posterior, that arise from the internal and external condyles of the humerus, would be relaxed by the projection of the lower end of the humerus forwards towards their points of insertion. The biceps muscle would be put upon the stretch, but this would be partially compensated by the supination of the hand; and the brachialis anticus alone would be the only muscle that would suffer severe stretching and have a tendency to restore the trochlea of the humerus to the sigmoid notch.

Now if we consider that, in three or four weeks, new adhesions will form amongst the lacerated fibres of the ligaments, and of the muscles, and

that all the strong muscles of the forearm and the powerful triceps will have become contracted, shortened and accommodated to their new condition, we can readily perceive that the bones will be held in their new position as firmly as they were previously in their natural one. Thus, the force required to lift the trochlea of the humerus backwards over the coronoid process of the ulna must be sufficient to break up all new adhesions, and to stretch the triceps and all the muscles of the forearm to the same length they were when the luxation occurred. This we know is no easy task, for a muscle requires a great force to stretch it suddenly; and hence the force required to reduce a dislocation of the elbow backwards must be fully equal to that which produced it.

The anatomical and physiological aspect of this dislocation fully accounts, I think, for the difficulty experienced in reducing it after a few months standing, and afford us a clue to the means required for its successful treatment.

Now if we regard injuries of the elbow-joint in any of their phases—whether as to the difficulties attending them—the consequences of improper diagnosis and treatment of the patient—the inevitable results to the surgeon's character and reputation—the legal vexations and expenses that may follow—and the nice anatomical and physiological details which they involve, we must, I think, agree that they form a class of cases that are well worth our careful and intelligent study.

THE CAUSES AND CONSEQUENCES OF DEFECTIVE VISION DURING SCHOOL LIFE.*

BY L. L. PALMER, M.D., TORONTO.

It was not my intention to take up the time of this Association this year with a paper, until about a week ago, our worthy President suggested to me that I write up the subject of hygiene of schools, which in its importance so commended itself to my judgment, that I have undertaken to consider at least one phase of the question which may form a nucleus for further thought—a phase by no means the least important of all the conditions that affect early life—viz., The Causes and Consequences of Defective Vision during School Life.

* Read before the Ontario Medical Association, June, 1882.

It is now admitted by all who study ophthalmology, that the pressing danger of the eye during early life is myopia, or shortsightedness, the organic cause of which is too great a depth of the crystal, which causes the sharp image of an object to form in front of the retina instead of upon it. It is commonly observed by teachers and parents that school work is often associated with, and even hindered by impaired vision; but that it is an evil much to be guarded against and a danger, in many instances truly alarming, has not appeared to them. If an ounce of prevention is worth a pound of cure, and this more valuable prevention in the light of present science and research is more easily possible; if the children of to-day are the men and women of twenty years hence, then it becomes us to turn our scientific labor and much thought to the well-being of children, and see that their physical, as well as their mental health, be properly guarded against dangers unobserved. Delicate as is the eye, it will when emmetropic, and in a state of health, bear any amount of use; but when it has lost its balance, or its normal proportions, its work is done with effort and but imperfectly, and it rarely can be brought back to its original perfection of action, but is prone to lapse into still greater disability of function, or even into actual disease.

It is found from the collected statistics of well-known scientists, such as Enissman, of St. Petersburg; Conrad, of Königsberg; Loring and Darby, of New York; Cohn and Just, of Germany, and others, that myopia is congenital only in a small proportion of cases, that most children, up to 5 or 6 years of age, have normal vision, and from this age up to 15, or according to Donders, 20 years is the period of development of myopia; that few are myopic before this period, and fewer still, if any, become so after; and this is the age when children are pressed into school and are forced to endure all the pains and penalties of the cramming system, in these days too common, which aim at intellectual development at the cost of impaired vision, and sometimes almost of complete loss of sight, if indeed it does not defeat itself in gaining the end it seeks. While these years, from six to twenty—the school life of children—is the period when myopia becomes developed, it is also established by careful and extensive statistics from the examination of over 20,000 school children, that

the defect increased numerically as the pupil advanced through the different grades of the schools. Cohn, of Breslau, found 6.7 per cent. of myopia in the elementary, 10.3 in the intermediate, 19.7 in the high schools, and 26.2 in the gymnasias.

Other authorities quoted above have made similar investigations with like results; and among the causes assigned for this uniform development of it are imperfect light, impure air, bad construction and arrangement of desks and seats, badly printed books; all these conditions are found acting, not alone in the school-room, but at home, when the child returns with a task to perform, which taxes the eyes to a late hour, or after the preparation for the next day is completed. How often do we find the young person engaged with a thrilling story, or a fascinating romance, willing to sit in any remote corner of the room, and strain over a badly-printed and badly-illuminated page, conditions unfavorable to the strongest eye, but most damaging to one pre-disposed by heredity, or otherwise, to myopia. In addition to the above facts it is found that it is more especially proper to cultivated nations, while uneducated people and barbarous tribes are almost entirely free. The Germans are said to show a greater number of myopias than any other country. So much is this the case, that any passing traveller through the states of Europe must observe that spectacles form a notable feature in the German physiognomy. This points at once to their high intellectual status, to their indefatigable labor in intellectual pursuits, and the bad hygiene of their schools and school system, conditions existing in unchecked operation through all their history. There is a general agreement among authorities that a great development or increase of it takes place during school life, and the result is largely due to preventable causes. Brudenell Carter says: "There is no longer any room for doubt, that badly-lighted and badly-fitted schools form a great machinery for the development of myopia. And it is possible that this machinery where, as in Germany, it has for a long time been in unchecked operation, may have an important influence upon the form of the eyeball, which will be inherited by large numbers of the population."

Other authorities make similar statements. Ribot urges that, "Since constant study creates myopia and heredity most frequently perpetuates, the num-

ber of shortsighted persons must *necessarily* increase in a nation devoted to intellectual pursuits"; and Dr. Loring goes still further by saying, that "If by a nation devoted to intellectual pursuits, we mean that compulsory education shall be carried out in the full extent of its original meaning, and applied to every child that is born, be it male or female; and if Germany is going to be taken as the type, and every other nation desirous of intellectual progress be compelled to follow her lead as an example, then I am of the opinion that not only the educated classes, as the term is commonly understood at present, but that the world at large will, in time, become near-sighted." If such views, original and startling as they appear, are near the truth, it becomes a matter of national importance to see wherein the school and its hygienic and architectural conditions act as a cause of near-sight, and discovering the cause, if possible, to remove it.

It is not my intention to construct a model school-room, much less a model home; this can be better done elsewhere. But I may be permitted to mention in brief a few of the conditions causing myopia that are common to both school and home life of the young.

(a) A bad light is one of the most certain causes, situated as it too often is in front of the pupil or at his side, shining with a glare on a level with the eye, producing great irritation, which is the precursor of a progressive myopia.

(b) Anything favorable to congestion of the head, as a bad position of the body, which is too often a necessity from badly constructed desks and seats, or which is perhaps a matter of choice when the pupil of studious habits gets in the corner at home, and with a book in the lap and bent trunk he pores over it till a late hour. Under this head might be included heat of room, wet feet, cold floor, indigestion, excessive length or intensity of study without interruption.

(c) Excessive tension of the eyes for near objects, as when a book is brought too near the eye for hours daily throughout an educational career.

(d) "Peculiarities of food, indifference to ventilation, disregard of other hygienic requirements, want of out-door exercise, and a peculiar tendency toward a sedentary life, all of which are provocative of a certain *laxity of tissue* and want of resistance in the investing membranes, which finds its expression in the eye, in a distension which is in fact myopia."—*Loring*.

We need not go far to show that all these conditions are largely present during school life, and it has been abundantly shown that the rapidity of development of myopia is in proportion to their presence and to the early age at which children are pressed, either by authority or natural inclination with studious habits, regardless of their optical condition. Alarming as the fact appears to the ophthalmic surgeon, and important as is the eye in its intellectual, apprehensive, and discriminating powers, yet there is no organ in the body guarded with so little care, and strange to say, its greatest weakness is popularly counted its strength. We often see myopes comfort themselves by saying that short-sighted eyes are strong, or *healthy* eyes; on the contrary, a short-sighted eye is a *sick* eye, a *diseased* eye, and is very likely, from the habits it engenders, to make a sickly body; quite as much a diseased condition is it as an hypertrophied heart and as little able to perform its functions, and we watch a case of myopia with as much interest and anxiety as you do first an hypertrophied and then a dilated heart subsequent to repeated attacks of asthma. It affects the physical, mental, and moral development of the child. The ordinary sports or plays of the campus are quite too much for him. The cricket, the base-ball, or the lacrosse have requirements beyond his range of vision, and in these he is unable to compete successfully with his fellows; so with a sense of incapacity he retires from the field where the mind gets its recreation and the body its health, and seeks his pleasure and his recreation in his books. This, though at first a pastime, soon become a passion and he becomes a book-worm, engorged with much that an age of rapid printing can supply, without taking time to reflect or digest what he has received. He therefore suffers a kind of mental dyspepsia, which is, to say the least, no evidence of mental strength—a condition as foreign as possible to a true educational process, which is the application of thought or the development of the processes of reason.

A fond parent encourages these so-called studious habits, which become more a habit than a desire for the acquisition of knowledge, and entertains a strong hope that the future will realize brilliant literary accomplishments; but the defect of sight is operative at all times; he becomes retiring, diffident, hesitating, and cautious. His means of acquiring knowledge through outward objects have

been limited to a very narrow field, his own small field of vision. He can see all the beauty of a rose or a violet, but a beautiful landscape or the autumn tints of the forest are all a blur to him, and he knows nothing of the inspiration that comes therefrom. He can see and deal with the minutest mechanism of a watch and delight in it, but finds no pleasure in architecture; he becomes a man of details and intricacies, at the expense of unity and comprehensiveness. He also judges men by their intentions, at quite a disadvantage, and forms wrong opinions of character. Our English language—all language—is so constructed as to be susceptible of ten times of opposite meanings by a few changes in the lines of countenance. Hence, across the table, or in a room, he loses the ever-varying shades of expression that come most directly from the heart, and trusts to the ear, by which he is often misguided. Now all this must have its effect upon the general disposition, upon the character, and the health; and though it may not affect to such an extent every degree of myope, yet the majority, I am satisfied, of those who remain uncorrected, suffer more or less of these disabilities.

There are other optical defects, such as hypermetropia and astigmatism, which affect the individual's comfort, his health, mental attainments and character quite as much; and on these it might be of interest to dwell, as they affect the manhood in an entirely different way; but I will not prolong my paper. Enough has been said to show the gravity of abnormal vision. The attention it should command from both teachers and parents, and the importance of submitting every child to a careful examination of his optical condition before urging him into a long educational career, not only to see whether he is capable of pursuing such a course without danger, but to see that he is supplied with properly-fitting spectacles which, happily for either the myopic, the hypermetropic, or the astigmatic, may now be so given, as to reduce the eye by their help to the condition of a far-seeing eye, and thus permit the individual to cultivate the same tastes and pursue the same occupations as if the eye was naturally a normal eye.

And finally, Mr. President, as you and your confreres are taking such an interest in your duties on the Board of Health for Ontario, and your labors, which will be of inestimable value for the

public weal, are to be expended largely in discovering and applying the valuable ounces of prevention, I may be permitted to entertain the hope that the question that I have but briefly brought before you may not be deemed unworthy your consideration, and that the hygiene of our schools, which is at the very foundation of future society, may receive that attention which it so much demands, and which our science is so eminently calculated to bestow.

Correspondence.

INTERNATIONAL CONGRESS OF HYGIENE.

To the Editor of the CANADA LANCET.

SIR,—I have not written to you before, because England's hospitals would be no subject for remark, as there are few Canadian members of our profession who are not thoroughly acquainted with their extent and excellence, but here I am quite on other ground, certainly not to the profession a *terra incognita*, nevertheless a country the medical institutions of which are comparatively little known, I will therefore give you a very brief description of my visit to the Hospital "Cantonal" and University of Geneva prior to the opening of the Congress.

The grounds around—probably not quite so large as those surrounding our Toronto Hospital—are kept with much taste, the flower-beds well cared for, and the parterres had a very gay appearance. At the porter's lodge we were, on announcing ourselves members of the "Congrès International," cordially received, my companion, a visiting surgeon of the Hospital of Bordeaux, taking the lead in making the request for inspection. At the doors we were most courteously met by the Internes, and by one of them taken all over this very admirably appointed and excellently kept hospital, every comfort, convenience and scrupulous attention to cleanliness being noticeable, whilst the manner in which the patients received their medical attendant, sufficiently testified to the thoroughly friendly relations existing between them. Having gone through the wards of the main building, our Cicerone introduced us to the Surgeon who had charge of the five large tent wards, commencing at a distance from the build-

ing of two or three hundred yards, and distant from each other about fifty yards. Each tent ward is entered by a flight of three or four steps, about therefore three feet from the ground. The polished floors are of narrow flooring, tongued and grooved, and apparently quite air-proof; the shape is a parallelogram of about fifty or sixty feet in length by thirty wide, the walls are of canvass tightly stretched, perpendicular, in height fourteen feet; at that height the sloping canvass roof commences. The bedsteads are of iron, and covered with bright-colored counterpanes. The beneficial effect of these tents in all cases after operation, where there is danger of erysipelas, or any form of septic poisoning, or in cases of ovariectomy, you will readily imagine. The surgeon informed me that they had long abandoned the performance of ovariectomy in the main building. I hope some of Mr. Worts' richly endowed relatives will take it into their heads to furnish our hospital with similarly attractive tent wards. They are occupied here from April until the middle of October, usually.

In the afternoon at two o'clock we repaired to the very handsome and commodious Convocation Hall of the University, a very large Grecian building, with heavy Corinthian columns, occupying three sides of a square, ground floors reached by flight of stone steps, main building with very lofty and wide corridors containing very numerous lecture-rooms and Convocation Hall. The large hall was decorated with French taste, the centre of the amphitheatre occupied by delegates to the Congress; around this, and on the level with the highest range of seats broad foyers as at an opera, running completely around the semicircle on which were placed rows of comfortably-cushioned seats for the ladies or male friends of members of the Congress; above, another wide gallery encircling the amphitheatre, for the general public. This attempt at a "*mise en scene*" may probably suffice for a description. Dr. Lombard, Provisional President, invited Dr. Schenk, delegate of the Federal Council, to welcome the members. Space will not permit an attempt at even an epitome of this speech or those which followed by Messrs. Heredier and Le Counté, Legislative and Executive Officers of the Federal Government of Switzerland; suffice it to say that they were in spirit and delivery all that could be desired. M. Lom-

bard, President of the Congress, and former President of that of 1880, then addressed the assembly. I may here remark that this gentleman is a most admirably preserved specimen of a "boy" of eighty-two, with the vivacity and agility of a young man of twenty. What better illustration could the public desire of a long life passed, I have no doubt, under the influence of hygienic impressions, of the advantages to be derived by a strict adherence to the laws we attempt to illustrate, and in time hope generally to enforce. Dr. Lombard's speech sufficiently displayed that with the "*corpore sano*" he rejoiced in the "*mens sana*," being both eloquent and appropriate.

Mr. Dunant, Provisional Secretary, read a report of their labours relative to the organization of the Congress, and a list of delegates who had enrolled themselves as members. Mr. Lombard, the then Provisional President, declared their labour at an end, but on the vote of M. Pacchiotti, President at Congress of Turin, the President and members of Provisional Committee were confirmed in their several offices. M. Lombard then appointed the following:—

Presidents d'Honneur.—For Present Congress: France—M. M. Fauvel, Pasteur, Bonardel; Italy—Conade, Bodis, Pacchiotti; Germany—Eulenberg, Goltz and Varentalop; Spain—Monlego and Purlegas; Canada—Covernton; United States—M. Formiento, of New Orleans, etc., etc.

A magnificent reception was accorded to the Congress by the Mayor and Municipal Officers of the city. This took place in the Foyers of the Grand Opera. This splendid building is on a smaller scale, the model of the Grand Opera of Paris, erected at a cost of six millions of francs, which, with a very handsome and commodious Ecole de Medicine in the Grecian style of architecture, near the Cantonal Hospital, a large addition to the University, the Museum I think, and the gorgeous cenotaph surmounted by a bronze equestrian statue of the Duke of Brunswick in the Jardine Anglais, pretty nearly exhausted the twenty-eight millions of francs left by this diamond-loving Duke to the city of Geneva. These said Foyers are not, you understand, the large passages giving entrance to the different tiers of boxes, but two very spacious and exquisitely furnished salons in the front of the building. I will not further attempt to describe them than to say, such evi-

dences of magnificence, good taste and advanced knowledge alike in painting, sculpture and frescoes on ceilings, as are so remarkable in the palace of the Tuilleries, Louvre, and Versailles, are here to be found. In the second salon a very fine band of musicians from the Conservatory of Geneva, delighted the very large assembly by their admirable performance of pieces from the operas of the great masters. In addition to the immense number of delegates from all parts of the world, in the somewhat sombre black evening dress, there was a fair sprinkling of ladies in ball costumes, the bright and varied colors of which offered a contrast to the dark array of the gentlemen. There were exceptions, however; the representatives from Spain, Portugal, Servia, Roumania, Brazil and South America, must, I presume, have been highly distinguished, as the various orders on the lappels of their coats, and the collars of purple or scarlet velvet with pendants attached, must surely have indicated valuable services at different times performed, either in the civil or military service of their respective governments. On Tuesday morning the members repaired to the various sections they had elected as most in conformity with their tastes and line of study. I selected the third, on drainage, sewerage, disposal of sewage, etc., etc., thinking erroneously that all these questions would be treated from a general sanitary point of view, not exclusively from a sanitary engineer's standpoint, and when on Friday I read a short paper on the system pursued in Canada, having perhaps too wide a range, I was immediately brought to order, the President declaring that sewers and nothing else could be there treated of. Accordingly I gave a very brief account of the method employed, or recommended to be employed by our engineers in Canada. The members of the section permitted me to read and speak in English, on the understanding that a resumé should afterwards be given in French, and as I had not a sufficient knowledge of technical terms in that language, my friend, Mr. Adolphe Smith, the very able travelling correspondent of the London *Lancet*, obligingly undertook, and admirably performed the service. I may here remark that a great debt of gratitude is due to Mr. A. Smith, for the admirable manner in which he has represented sanitary engineering, as practised not only in Great Britain but in Canada; he is equally able and fluent in

addressing a French as in speaking to an English audience, and without his presence very many present in the section might have returned with the idea that only in France and Germany have any advances in the science been made. The contrary in everything practical, and best calculated to subserve the object of removal of the excreta as fast and as far as possible, so that it may not return to poison us in our dwellings in the form of noxious gases, or by filtering through the soil, find access to drinking water supplies, and thus convey the germs of various diseases, is I believe the case, for instance the present epidemic of typhoid fever in Paris. In the first section this question of typhoid was taken up by a Hungarian physician, the burden of his discourse being the advocacy of the necessity for an International Convention on the subject. The second section received several reports on the disinfection of schools and hospitals. The exclusive subjects in the third section I have already dwelt on. In the fourth section were various papers concerning school hygiene. In the fifth section the papers were exclusively on* demography (statistics). At two o'clock the general meeting took place in the Convocation Hall. The first paper by M. Pasteur, was on the discovery of a new specific micrococci. Pasteur's deserved reputation had attracted a great crowd of the citizens in addition to the members of the Congress, and his discourse was listened to breathlessly. His discoveries pointed to a general method for the attenuation of specific virus by exposure to the oxygen of the air.

Yours truly, C. W. COVERNTON.

Geneva, Sept. 4th, 1882.

NASO-ORAL RESPIRATORS.

To the Editor of the CANADA LANCET.

SIR,—Having read several articles lately on the antiseptic treatment of phthisis, and wishing to try this plan of treatment, I induced a patient to order one of McKenzie's Naso-oral Respirators. The Kingston druggists not having them on hand, one of them kindly sent to Mr. Mills, of Brantford, the agent for the Dominion, who immediately forwarded one. I confess I was somewhat surprised at the simple construction of the little instrument, which, however, seemed very well adapted for the

purpose. But I confess that I was much more surprised, and also indignant, when I was told that the retail price of the little article was four dollars. I really did not know how to put a face on to tell my patient that such was the case, so I compromised the matter by concluding to pay for it myself, and loan it. Let me describe it in a few words for the benefit of those who have not seen it. It is about the size of a small coffee-cup, made out of a bit of light stove-pipe iron, bent somewhat in the shape of a small coal-scuttle, with a little perforated lid in one end, for receiving a small piece of sponge. The thing is so simple and cheaply got up that it might be sold for fifty cents, and then pay 100 per cent. profit. In fact the article as it stands before me might be made of silver plate for one half the price it is sold at. Whether Mr. Mills, the Dominion agent, wishes to make a fortune by selling inhalers, or whether the Edinburgh maker is a rogue I know not, but certainly the price is exorbitant. I have been in practice for 16 or 17 years, and it caps anything I have met, and I wish to call Mr. McKenzie's attention to the fact.

Yours, etc., MEDICUS.

[The regular retail price of the inhalers is \$3.00 each, or \$2.50 by the half dozen. The Kingston druggist no doubt added \$1 for his profit on the transaction].—ED. LANCET.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

A meeting of the above association was held at Clinton, on the 2nd ult. The following members were present:—Drs. Stewart and Hurlburt of Brucefield, Scott and Campbell of Seaforth, Graham of Brussels, Sloan of Blyth, Macdonald of Wingham, Hyndman of Exeter, Hutchinson of Bluevale, and Worthington of Clinton.

Dr. Taylor of Goderich showed a lady 50 years of age, who has regurgitation, both through the mitral and aortic orifices. There is marked pulsation in the episternal notch.

Drs. Stewart & Hurlburt of Brucefield showed a case of well marked peliosis rheumatica. The patient is a man of 52 years of age. The disease is of three years standing, of an intermittent character. Regurgitation through the mitral orifice and

commencing degeneration of the heart. The disease so far has been uninfluenced by salicylic acid, iron and the alkalies. There is no change detected in the blood.

Dr. Hutchinson, of Bluevale, showed a case of epithelioma of the clitoris. Dr. Worthington of Clinton, gave a report of a long standing case of catarrh of the bladder, continuing 27 years and gradually getting worse.

Dr. Graham, of Brussels, exhibited some very good specimens of tubercle bacilli stained according to Ehrlich's method. He had tried Baumgarten's method but failed to make them visible. The sputa was taken from a patient well advanced in phthisis.

After the usual routine, the following very pleasant incident took place, viz: The presentation of a very handsome gold watch to Dr. Stewart of Brucefield, on the eve of his departure for Vienna. The *souvenir* was accompanied with the following address, which was read by Dr. Worthington:

DEAR DR. STEWART,—Your professional brethren, both in and out of this Association cannot help feelings of regret at your intended departure from among us. It is possible that not all, or any of us, may meet you again, and we desire before you leave, to express in some degree our appreciation of your unvarying courtesy and kindness—of your enthusiasm in and devotion to medical and surgical science—and of your entire unselfishness and willingness to render all the aid in your power to the members of the profession. Mainly through your efforts this association has arisen from a dormant state to be a successful and well known institution within and even beyond the boundaries of Ontario. Our desire is that our memories may be stored away in your heart, so that you can occasionally commune with us in your absence. In the name of, and by the wish of your professional co-workers we beg to present to you this memento as an indication of our regard. We wish you a happy and prosperous journey and entire success in the line of study you intend to pursue, and more than all we wish your safe return, that we may again see your face. Dr. Stewart made a very appropriate reply.

Dr. Graham of Brussels was elected Secretary of the Association in the place of Dr. Stewart.

The editor of *Walsh's Retrospect* having started a vaccine farm has found the new calling so successful as to necessitate a temporary suspension of the journal. He promises that he will take it up again in January.

Selected Articles.

SEVERE INJURY TO THE HEAD.

Clinic by ROBT. JOHN GARDEN, M.D., C.M., *Aberdeen Royal Infirmary.*

GENTLEMEN.—The first case I bring under your notice to-day is the man I now show you, who has been under observation for some time in the wards. His history is as follows: He was admitted on October 16th—that is, fully three weeks ago. The account given of him was that when drunk he fell down a stone staircase, lighting on the back of his head with considerable force. He was brought to the hospital, and his condition was found to be this: On the back of the head there was a contused wound of the scalp, running cross-ways, and about one and a half to two inches in length. The bleeding was considerable. The wound extended in depth to the bone, the pericranium being laid bare. On examining with the finger there was no slit or depression in the bone. Blood was issuing in moderate quantity from the nose and left ear. Generally, the patient was insensible and lay on his back with the muscles of the extremities relaxed. The face was pale, the skin generally blanched, with the surface cold (temperature lowered). The pupils were regular, rather dilated, acting slowly to light. The breathing was shallow and quiet, with occasional sighing. The pulse was 60, small, empty, and uneven. The treatment adopted was simply application of warmth to the surface of the body, and attention to the wound, which was washed with a solution of carbolic acid and dressed with antiseptic dressings.

October 17th; Pallor on left face and skin; patient beginning to be restless; insensibility not so deep; can be more easily roused; is irritable when disturbed, especially if his eyes, which are kept firmly closed, be opened, speaks incoherently when roused. Retention of urine, catheter had to be used. Pulse 100, fuller, quicker, and more even; temperature 101°. Wound doing well.—18th: Patient still restless and irritable; lies on his side with legs and arms flexed; face flushed and head hot. Pulse 102; temperature 102°. Cold applied to head. Wound doing well.—19th: Patient still restless, irritable, confused, and incoherent. Pulse 108; temperature rose in the evening to 103.5°. Patient had an enema of house medicine and soap. Use of catheter no longer necessary. The high temperature continued for several days, and gradually subsided; the patient gradually regained consciousness and became rational. Pain in the head was complained of and deafness. He is now as you see him, almost well. He complains occasionally of pain in the head, and feels dizzy when he stands up. His memory

is somewhat defective, and his manner generally is peculiar. Temperature and pulse are normal. On the left ear he is very deaf. On examination with the speculum, there is a raw line extending across the membrana tympani, pointing to a rent having been present.

The second case I shall relate is a most interesting one. About two years ago I was called to see a youth, aged seventeen, who had sustained a severe injury to the head. The history I got was that the lad was standing with his hands in his pockets near some companions who were throwing the hammer. His back happened to be to the thrower. The hammer swerved from a straight course, and made directly for the boy's head. He was called to, ducked his head, but only so far as to bring it exactly athwart the parabolic course of the weapon, which felled him bleeding to the ground. When I saw him he was lying on the floor of a house into which he had been carried. On the upper and back part of the head to the left side there was a wound surrounded by a considerable swelling of a soft, doughy nature with hard edges. Generally he was insensible, or could be roused slightly when spoken to very loudly; the face was pale, and the surface of the body cold; the breathing was shallow, quick, and tolerably regular with occasional sighing; the pupils were unaffected, sensitive, though somewhat slowly, to light. On consultation with Dr. Rodger it was resolved to enlarge the existing wound, and evacuate the blood effused into or below the scalp. This was done in order to examine the state of the bone. On doing so, and getting rid of a large quantity of effused blood, there was found a large deep, circular depression of the skull, with a diameter of at least three inches, and corresponding to the globular hammer which struck it. The outer table of the skull was shattered, several large fragments were removed, and these I now show you. The inner table was depressed, but regularly, that is to say, there appeared to be no spicula projecting into the brain likely to give rise to irritation. As the symptoms were solely those of concussion, and no signs whatever of compression manifested themselves, the edges of the wound were brought together, except at the centre, where a sufficient opening for the escape of any discharge was left. Cold water dressings were applied. Sometime after this the patient vomited. Now, gentlemen, it would but weary you to detail the course of this case. Suffice it to say that it ran uninterruptedly towards recovery. Under the influence of warmth to the surface of the body, the symptoms of collapse gradually wore off. The menial symptoms disappeared, and consciousness was slowly recovered. There was no great reaction. The temperature at no time rose much above 100°. From first to last there was no unequivocal sign of compression. The wound healed slowly by granulation. The

youth is now in perfect health, bodily and mental, bereft, it is true, of a large piece of the outer table of his skull, and having a permanent depression of great depth and size of the inner table.

The third case is that of a dyer, aged fifty-three, who was admitted into Jacob's Ward on the forenoon of Saturday the 22nd of May last. The account was that when drunk he had, that forenoon about 10 o'clock, fallen down a stone staircase and alighted on the top of his head. At the visit at 12 o'clock his condition was as follows:—He was lying on his back, insensible but not profoundly so, for he could be roused when spoken to loudly, but only roused. His face was pale, surface of body cold. The pulse was about 80, small and empty. The breathing, though slow, was shallow. The pupils were slightly contracted but regular. On the top of the head, on the right parietal and frontal bones, there was a slight swelling, but no wound or depression. That was at 12 o'clock. In about an hour and a quarter—that is, about three hours and a quarter after the receipt of the injury, matters had very much changed. The insensibility had increased and developed into profound coma. The pupils were now irregular, the left was much dilated and right still contracted. The breathing was slow, deep, stertorous, with puffing of the cheeks. The pulse was fuller and slower. The left arm and leg were rigid as compared with the right. The urine was retained and contained albumen. The swelling on the top of the head was much more distinct. Rapid intracranial effusion of blood was diagnosed. A consultation was held to consider the propriety of an operation. It was concluded not to operate on the grounds that the patient appeared to be moribund, and it was impossible to say in what part of the brain the bleeding was taking place, whether on the surface or at the base. This decision I afterwards had reason to regret. Meanwhile the symptoms progressed. The rigid muscles of the left side became paralysed. The face became flushed, and perspiration poured from it. The pulse was now full and very slow, but immediately before death small and quick. The temperature rose, and immediately before death was 104°. The patient died thirty-eight hours after the receipt of the injury. At the post-mortem examination there was extravasation of blood in the scalp over the right frontal and parietal bones. There was simple fissure of the skull, at the interior part, being separation of the inter-parietal suture, and, as it extended backwards, diverging into the right parietal bone. There was no depression. The upper surface of the brain was lacerated, and a large quantity of blood effused below the dura mater. The kidneys were granular.

Injuries to the head have always had and always will have a peculiar interest to the surgeon. In the literature of surgery, affections of the head and

brain occupy a very prominent place. Since the classical writings of Pott and Abernethy much has been written on these, as they have received the most careful attention from all surgeons of note. For this there are many obvious reasons. Extremely liable to injuries of various degrees of severity, from a slight cut or bruise of the scalp to severe compound fracture of the skull and laceration of the brain, it falls to the lot of every surgeon, nay, every practitioner, to treat many of these, and on the judicious or other management of even the apparently most trivial cut may depend to the patient consequences of the gravest kind. In these the possible dangers immediate or remote are very many, and in these more than in any other affections that I know of is the unexpected wont to take place. A patient comes to you with a slight cut on the head the result of a fall or blow. You, thinking the matter trivial, assure your patient that the injury is of no moment, and dismiss him after a two minutes' consultation, occupied mainly with general remarks. You hear nothing of him for a few days, when you are sent for to see him and find him in bed. A rigor and it may be sickness have seized him. The wound looks angry, a suspicious redness surrounds its edges. Great general depression characterizes your patient, and despite all your precautions your patient, especially if he be an elderly and debilitated individual, is dead within a week of receiving his injury from erysipelas of the most malignant type. On the other hand, you are called to a case where very severe injury has been received. You find severe contusion to the scalp and soft parts, unmistakable fracture to some part of the skull, and with it very great depression, while the general appearance of the patient is alarming in the extreme. You rapidly form and express a prognosis of the worst kind. Notwithstanding this the patient may take a turn, reaction set in, and complete recovery take place. Now these are no fancy pictures, they occur in practice every day, and the fact that they do teaches these two lessons. In the first place think not too lightly of any injury to the head, however slight it may at first sight appear; warn your patient of the possibility of serious mischief accruing if the wound be neglected, and if serious consequences follow—as they may do in any case—then you are commended for your foresight. On the other hand, however desperate the case may appear, do not too rashly volunteer a bad or fatal prognosis, as you may find yourself very unexpectedly in the wrong. Hippocrates it is, I think, who, with his usual sagacity, has a remark to this effect, that no wound of the head is too trivial to be neglected, and no injury too severe to be beyond hope; and Hippocrates undoubtedly is right.

Now, with these general remarks, let us look a little more closely at the cases I have brought under your notice. These are very fair examples of

the conditions known as "cerebral irritation," "concussion," or commotion of French writers, and "compression." Now, the first remark I would make is that one of the difficulties we, as clinical teachers, have to contend with is that students straight from systematic lectures, or from reading books, are apt to expect to find cases much more typical, so to speak, than they usually are. For example, take "concussion" and "cerebral irritation," two conditions, each presenting a certain series of symptoms, with which you are familiar in your systematic lectures. Now, you find, and this is only a necessary condition of the systematic exposition of a subject such as the one under consideration, certain symptoms given as characterizing the one, and certain symptoms as belonging to the other of these states. From this you would expect to find in actual practice each example of the one condition or of the other sharply defined, so that you would be enabled to say categorically this is "cerebral irritation," or this is "concussion," as the case may be. This is far from what you will really experience. The science of clinical surgery is of the most concrete kind, each case forming a problem to be solved in itself, generalizations, being only to a certain extent applicable.

Of the cases I have cited two recovered and one proved fatal. Look particularly at the symptoms of the early stage, and you will be struck with the similarity of these in all three cases. In all three had been a severe blow to the head. In all three there was immediate insensibility; in all three there were paleness of face and pallor of body; in all three there was shallow breathing; in all three there was small, rather slow, empty pulse; in all three the pupils were neither dilated nor contracted, but regular and acting slowly to light. These lasted for a longer or shorter time in all three. Now, what do these symptoms point to? Well, they are just the symptoms of "concussion"—that is to say, they are the symptoms which you find after a severe blow to the head, when either recovery takes place, or death may quickly follow, and the post-mortem examination may show neither depression of the skull, nor laceration of the brain, nor effusion of blood. In other words, there was in all three, disregarding meanwhile the termination of the cases, a first stage of "concussion." This is what, I believe, happens in the great majority, if not in all, cases of severe injury to the head; indeed it is difficult to conceive of the possibility of force sufficient to cause fracture or laceration of the brain and hæmorrhage being applied to the skull without causing this "concussion," especially when it is remembered that a mere blow from the fist often suffices to cause stunning, which is no other than slight concussion with temporary effects. From this statement it follows that it is, strictly speaking, incorrect to compare or contrast "concussion" with "cerebral irritation" and "con-

pression"; for, as we shall afterwards see, these belong to different stages although of the effects of a blow.

Now what is this "concussion?" What is this obscure, mysterious condition which is accompanied by symptoms so severe, and which may be so transient? Much has been written on this subject, and the older writers were greatly in the dark about it. They were therefore left to assumptions which recent investigations have clearly proved to be untenable. Before referring to the explanations which have been offered, I should like to point out that the one outstanding symptom common to these cases is insensibility of greater or less profundity and of longer or shorter duration. This points to a suspension of the functions of the cerebrum, and the question is, "How does a blow, how can a blow effect this? The answer to this resolves itself into an account of what pathology and physiology have taught us on the matter. It must be remarked that the pathological changes in the brain are often remarkably slight to appearance and may be overlooked. This it was that misled Pott and writers of his time, and drove them to the first assumption in regard to the condition of the brain—viz., that as a result of the blow vibrations occurred; these reverberated from the side of the skull opposite to that receiving the blow; and thus, by a series of reverberating vibrations, there was caused molecular displacement of the minute elements of the brain. Now, gentlemen, consider for one moment, and do you think it at all probable, having regard to the extremely fine constitution of the brain, that all this shaking can take place without producing laceration and consequent hæmorrhage? But apart from this, is there reason to believe that a blow, however severe, can, in the conditions in which the brain is placed—viz., in a cavity with unyielding walls, and completely filling that cavity—I say is there reason to believe that a blow can produce such a through and through shaking and misplacement of molecules as this theory supposes? Experiments of a very interesting kind come to help us here, and, to my mind, settle the question in the negative. Alquié and Cama took a glass vessel, filled it with material with the consistence of brain, suspended in it a number of fine dark threads, and then concussed the vessel. No motion of the threads what ever was observed, showing that, although there may have been motion of the whole mass, the individual particles did not move. Similarly skulls filled with sand, in which an opening covered with a membrane had been made, and into which a long needle with paper on the end had been sunk gave entirely negative results. There is, in fact, no evidence that such molecular changes as supposed by Pott to take place occur, and his theory consequently falls to the ground.

Another theory is that based on the discovery

of Rokitansky and Nélaton—viz., a number of minute extravasations of blood in the brain. The theory was that the pathology of concussion was just a confusion of the brain with small extravasations. Unfortunately for this theory, it is an undoubted fact that cases occur where these apoplexies are entirely absent; and all, therefore, that can be inferred from their presence is that concussion and contusion occasionally co-exist.

I come now to the third and by far the most feasible theory of concussion—viz., that propounded by Fischer of Breslau. It is shortly stated thus: The blow to the head produces reflex paralysis of the vessels of the brain. Serious interference with the nutrition of the cerebral ganglia is produced, and this it is which give rise to the symptoms of concussion. In this connexion it is necessary to state that the one constant condition found post-mortem in fatal cases of concussion is an empty state of the arteries and a congested state of the veins. This is the pathology of concussion. Looking at the question from a clinical point of view, and without going minutely into the matter, which would be impossible now, it will suffice to ask, and if possible answer two questions—viz., 1. Can a blow applied to the head produce this paralysed state of the vessels? 2. Given this condition of the vessels, does it account for the pathological appearances found after death and the symptoms during life? In regard to the first question, there is evidence that a blow can produce such a condition. It is well known that irritation applied to the skin may produce a marked reflex effect on the vessels of the brain and elsewhere. Nothnagel irritated by electricity the skin in the neighbourhood in rabbits, and thus produced reflex contraction of the vessels of the pia mater. This contraction, however, was always of very short duration, and as Fischer points out, does not explain the duration of the symptoms of concussion. Other experiments, however, are more to the point. Goltz has shown in his well-known experiment of giving a blow to the belly of a frog, that paralysis of the heart and vessels can be produced, and that symptoms very similar to those of concussion, accompany it, while Koch and Filehne, by concussing the skulls of dogs and rabbits by a series of rapid blows with a hammer, produced the same results. These experiments go very far to answer in the affirmative the first question. In regard to the second question it is sufficient to say that an empty state of the arteries and a congested state of the veins is the only condition which is found constantly to accompany the symptoms which clinical observation discovers to be those of concussion, and that this condition is that which results from paralysis of the vessels, and, it may be, a partly paralyzed state of the heart. So much for what I have called the first stage of all the three cases, and its explanation. In all three the symptoms

were identical; the cases differed only in the duration of this stage.

On following the cases further, they are now found to diverge. What is called reaction sets in. The paralyzed condition of the vessels and heart begins to wear off. The tide of stronger circulation sets in. In the first case the symptoms I have described manifested themselves. They were—(1) Patient extremely irritable; (2) patient lying on side, with legs drawn up; (3) eyelids firmly closed; (4) quick pulse and fever, temperature reaching 103° ; (5) mental symptoms lasting two or three weeks. Now what do these symptoms indicate? They are fairly marked symptoms of a condition which has been called "cerebral irritation," and what is that? I believe it to be no other than a variety of the stage of reaction, or more properly perhaps a degree of reaction. It is probably due to a hyperæmic state of the brain, more particularly of the meninges, as evidenced by considerable rise of temperature and of febrile symptoms generally. The symptoms of this condition have always appeared to me to be very similar to those found in non-traumatic cases where inflammation of the membranes of the brain is believed to exist. But what of laceration of the surface of the brain? Is that not the pathology of cerebral irritation? There is no positive evidence to show that it is. Experiments on animals prove that the cerebrum can be cut or torn to a considerable extent without giving rise to marked symptoms. Clinical experience points to the same conclusion. In a remarkable case which happened in this hospital, under the charge of the late Dr. Kerr, where a man bending forward in front of a circular saw in motion, had his forehead ripped open, and the brain so lacerated or torn that a considerable quantity of brain substance escaped, recovery took place without any marked cerebral symptom whatever. It is extremely doubtful if laceration *per se*, and apart from hæmorrhage and secondary changes, does give rise to any symptoms other than those that would result from destruction of the part of the brain lacerated. It is certainly not rational to ascribe the symptoms of cerebral irritation to superficial laceration. Be the exact pathology of cerebral irritation what it may—and our knowledge of matters cerebral is anything but complete—what I wish to point out is that, looked at clinically, it belongs to the second reactive stage of concussion, and it is therefore as unscientific, as inconsistent with observation and fact, to contrast it with this as if it were a distinct condition *ab initio*. One other symptom in this case calls for remark—viz., bleeding from the ear. What did that indicate? In this case probably only rupture of the membrana tympani. There was no escape of clear fluid, and therefore nothing to point to fracture of the base of the skull.

The second case was a more typical one of

concussion, where the symptoms gradually subsided, the general paleness disappeared, the pulse recovered, and consciousness gradually returned. Vomiting took place as reaction began. The reactive febrile symptoms were moderate. Perfect recovery took place. The interest attaching to this case was the depression of the skull. In this case there was about as much depression as well could be, and yet from first to last there was not a single symptom of compression. Now, this raises the important question. Can depression of a fragment of bone, acting as it does on only a comparatively small part of the brain, and apart from any secondary changes which may take place as the result of the blow and depression, give rise to symptoms of compression? If this case teaches anything at all it indicates that it is exceedingly doubtful if it can. Now, gentlemen I do not wish to speak dogmatically or infer too much from one case, but a case such as this, admitting the possibility of such a thing, forms a very staggering exception, and, I think, has great value attaching to it when weighing facts and evidence *à propos* of this question. When it is remembered that previously, symptoms were ascribed to compression which belong to concussion simply because depression was present, and when the fact is taken into account that experiments on animals performed by Pagenstecher and others (which I need not detail) show that distinct symptoms of compression come on only after a large quantity of fluid is forced into the skull and produces great pressure on the brain, then it is extremely difficult to see how a depressed piece of bone, exerting at most a comparatively slight degree of pressure and existing only on a very limited part of the brain, can determine symptoms so marked as those of real compression.

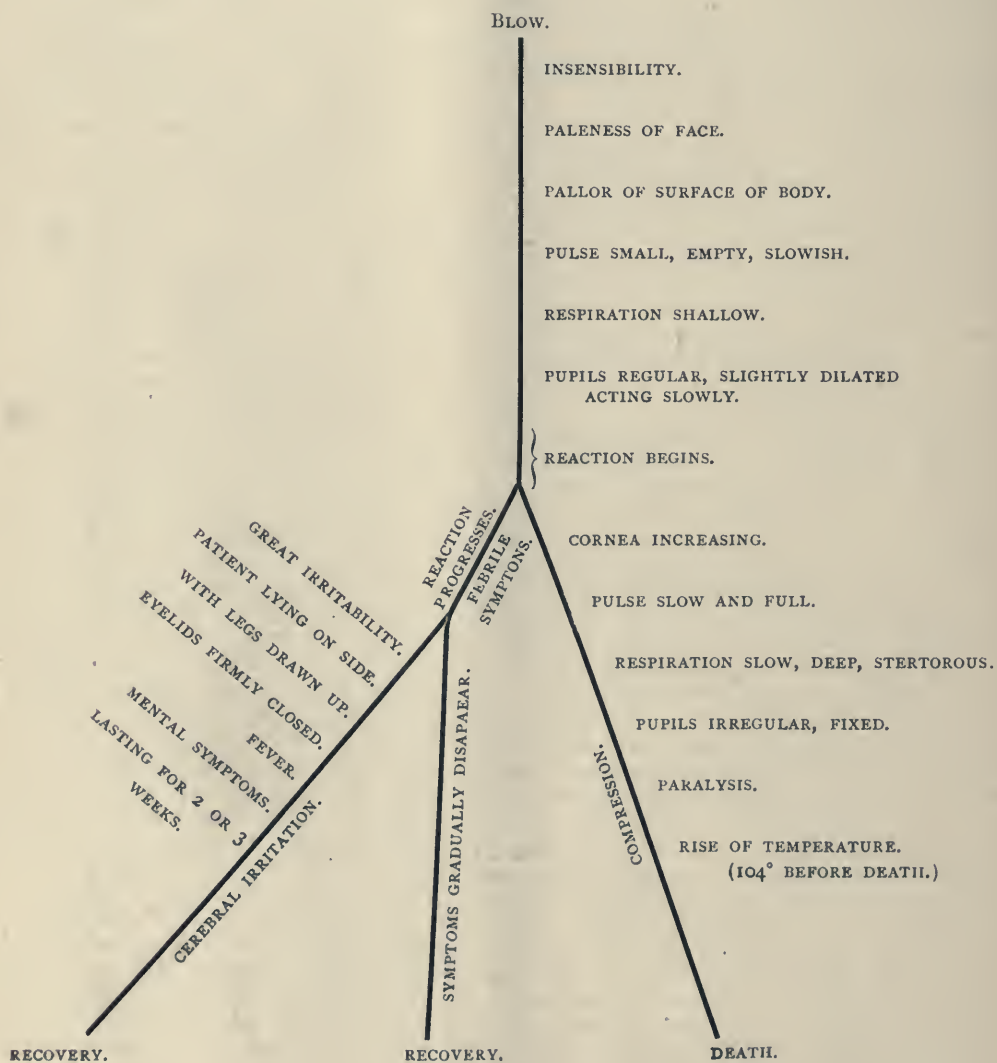
If, then, depression of bone does not produce symptoms of compression, what does? Our third case, I think, goes far to answer this question. Here we had a first stage of concussion, and here, too, reaction set in, but with a very different result. There being considerable laceration of the brain and rupture of vessels, with the recovering circulation hæmorrhage took place. There was found post mortem a very large effusion of blood. Now, apart from an effusion or abscess formation that may occur later in the history of any given case of injury to the brain, it is highly probable that this is the constant cause of real compression occurring early. What, then, are the symptoms of these conditions? Our case gives us them. They are:—(1) Coma increasing in profundity; (2) pulse becoming slow and full; (3) respiration becoming slow and stertorous; (4) pupils uneven; (5) paralysis; (6) temperature rising as symptoms increase. These are unmistakable symptoms, and they come on after symptoms of concussion; and, like cerebral irritation, compression is an outcome of concussion. Instead, then, of putting the symp-

toms of these conditions, as is usually done, in parallel columns, I have arranged the symptoms in diagrammatic form (see next page), showing at a glance the course any given case of injury to the head may take. Of course this table has not reference to any secondary complication that may arise, such as abscess formation, and it should be remembered that all the stages vary much in duration in any given case. If death takes place from concussion *simpliciter*, as it may do, then it is likely to occur very early. So much for the symptoms. As to *diagnosis*, our cases did not present any great difficulty. In the third case, at one stage the question "Drunk or dying?" might have occurred; but the very rapid course of the symptoms very soon made the real state of matters clear.

Now, gentlemen, what do these cases teach us as to the *treatment* of severe injury to the skull? In other words, suppose you were called to see a case similar to any of these I have described; what would you do? and why? In the first stage the indications would be to restore the enfeebled circulation. This is effected by applying warmth to the surface of the body by means of hot bottles, etc. If the collapse be profound, friction to the surface of the body, or the application of an irritant, such as mustard, will do good. It is no use being too officious at this stage, as time must be allowed. During the reactive stage, if there be symptoms such as those we have in the first case—viz., those of so-called cerebral irritation, then cold to the head, shaving the hair, darkening the room to obviate the irritating effect of light, will be beneficial. If there be insomnia bromide of potassium, alone or combined with chloral, will be found useful. In all cases attend to the bladder and bowels, keeping the latter tolerably freely open. In cases such as the second the indications for treatment are few beyond attention to the bowels. But this case and the third case suggest very interesting questions as to local treatment, and more particularly as to when and what operative procedure should be employed. What are the conditions that render early trephining necessary? This is the great question that has divided surgeons. Pott laid down the law very strongly that this operation should be done in all cases of fracture of the skull with depression, and, after describing the operation and various measures to be employed, he complacently indicates that the surgeon who has adopted these may say to himself, in the words of Pope,—

"Thus far was right; the rest we leave to heaven."

Heaven, however, was not in many cases too propitious. This dictum of Pott's was followed by surgeons at the time blindly. Thus it has been too often in the history of surgery. Many a *hereditas damnosa* has been handed down in this way. Abernethy, however, put a check on it; and from the observation of cases where he found that frac-



ture with depression did not of itself in every case or in the majority of cases, prove fatal, advised waiting for symptoms. He simply used his own judgment, and he was right. What do our cases teach us on this point? If there be anything that our second case proves at all, it is this, that fracture of the skull with marked depression is not an indication for trephining. But it teaches more; it shows that compound fracture with depression is not an indication for operating. This is just exactly what would be expected from what I have already said when discussing the symptoms as to depression being a cause *per se* of compression. Depression of a part of the skull, it was argued, cannot give rise to symptoms of compression. Elevation, therefore, is no use. But what of our third case? In this case there were indications for trephining; and I regretted that the operation was not done, although the reasons for not doing it were quite valid. There were distinct indications of compression, although without depression, and it would have been interesting to have seen if these would have been relieved by opening the skull. Here, again, we have corroborated what we have previously said as to the cause of symptoms of depression coming on early—viz., that they are probably due in all cases to rapid intra-cranial hæmorrhage. What, then, are the indications for trephining early in severe injury to the skull? They may be, I think, arranged under the two following heads:—

1. When there is reason to believe that there is rapid intracranial hæmorrhage going on with or without depression. This fact will generally be indicated by such symptoms as I have described in the third case, but a presumption may be afforded in favour of bleeding from the exact situation of the injury. For instance, if there be a fracture at the interior inferior angle of the parietal bone, it is quite possible that the middle meningeal artery may be injured. This does occasionally happen and should be kept in view.

2. When a foreign body has penetrated the skull and is lodged in the brain, and cannot be removed without enlarging the opening. These are the indications for early trephining. But what, you will say, of stellate fractures, do these not present absolute indications for operating? In answer to this I would say that it is extremely questionable if they do. But granting that they do they come under this second head, for in these the presumption is that the inner table of the skull being shattered the fragments are driven in upon the membranes and are thus for all practical purposes foreign bodies which sooner or later will by their irritation cause inflammation of the membranes of the brain.

Gentlemen, I have touched upon various points of great interest in connexion with injuries to the head. It has not been possible to discuss these

fully within the limits of one lecture. I have endeavoured to explain the more salient symptoms of the cases I have described to you and to draw what practical conclusions the facts fully warrant. I trust that what I have said will in some measure stimulate you to the study of these all-important affections.—*Lancet*.

SURGICAL CASES.

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CONTRACTION OF THE KNEE-JOINT AND ITS RELIEF.

The patient is a well-built, well-developed, and muscular individual, thirty-seven years of age, used to work requiring strength and endurance. Until he met with an injury in March last, in the St. Louis Tunnel, his health had been good. The injury consisted in a blow upon the right knee-joint. Pain and swelling ensued. Nevertheless, he continued to work for about eight weeks, pain gradually increasing. At last, he had to lay up, and remained helpless for several months. During this time, his limb became flexed, and all efforts at extension were so painful as to prohibit their renewal. Thenceforward he resorted to crutches.



FIG. 1.

In July he presented himself at our clinic. The knee-joint was virtually sound and painless. Its motion, within a limited range, free; the patella in place and movable; but extension could not be effected without painful resistance on the part of the inner hamstring muscles. Their contraction could not be, even temporarily, subdued by profound anæsthesia. Fig. No. 1 represents the condition of the patient on admission.

It would seem as if at no time the integrity of the articulation had been disturbed. Probably a concussion at the internal condyle of the femur, lays at the foundation, explaining the unusual contraction of this muscular group.

After myotomy of the contracted muscles had been performed, the limb could be extended without force, and held in straight position by a plaster of Paris bandage. The case is not recorded as something extraordinary, but as an encouragement for younger practitioners, who, not infrequently, exaggerate the obstacles in dealing with such cases. If placed in charge of recent injuries to the knee, a prompt immobilization of the joint is a sure preventive of deformities.

SUPPURATIVE COXITIS—EXSECTION—RECOVERY.

The history of this little patient is painful to relate. Once he was a healthy, vigorous, and lively little chap. A fall upon the trochanter major excited coxitis with its concomitant malposition of the extremity. A professional neighbor scented dislocation of the femur. But when he had done with the little sufferer, the inflammation had advanced to suppuration, and the apparent elongation of the limb had given way to apparent shortening. Another son of *Æsculapius* gave him the benefit of weight and pulley, and the answer was an abscess in the groin.

Then our clinic had a chance. Admitted to the hospital department, we had ample opportunity to elicit the entire complex of symptoms. The clinical records of the institution relate briefly as follows: "General attenuation and debility; fever, with daily exacerbations; no appetite; thirst prevailing; tongue coated, its margins moulded by the teeth; bowels either sluggish or loose; sleep frequently broken by that peculiar pain in the affected extremity, so characteristic in coxitis, and obviously excited by reflex spasms; pelvis elevated; extremity flexed—adducted and inverted; abscess in Scarpa's triangle; group of adductor-muscles and the tensor vaginæ femoris rigidly contracted; limb more reduced in circumference than its fellow; shorter by two and a half inches." The case is obviously of traumatic origin; but the pedigree on mother's side shows pulmonary tuberculosis; father fine specimen of physical perfection.

From the records, the case is a grave one, admitting of no favorable prognosis. Moreover, a

malarial country surrounds the patient's domicile, and has made some impression upon liver and spleen, both being enlarged. Notwithstanding unfavorable circumstances, the patient rapidly improved under treatment: 1. Division of contracted muscles; 2. Immobilization of the affected articulation, both securing its absolute rest. Thenceforward, undisturbed sleep. Internally: Quinine, to subdue the fever; generous diet, with Trommer's extract of malt (Fremont preparation), alternately in combination with iron or cod liver oil. It will be seen that the abscess was not touched. In renewing the plaster bandage, the abscess was found diminishing in size, and entirely painless. Very likely, the healthy surroundings and the hygienic advantages of the college building, had something to do with the rapid amelioration of our patient, at least as far as the malarial infection was concerned. When the warm season set in, we permitted the patient to return home, not before, however, we had the plaster-bandage replaced by Thomas' splint, raised the healthy extremity by an iron frame two inches in height, and provided a pair of crutches. Occasionally the patient was brought to town and submitted to our inspection. He was doing well, and fast assuming a healthy outlook.

In August of the same year (1881), the measles broke out in the neighborhood. The patient was promptly removed to a farm, but unfortunately too late to escape the scourge. The attack was rather mild, and terminated without any unfavorable occurrence, except that it most disastrously compromised the progressive convalescence of the articulation. During the supplementary crisis of the measles, the joint became painful. The abscess, which had by that time, entirely disappeared, refilled, and by the inflammatory condition of its environs manifested the irritant character of its contents. When forced to be opened, it discharged matter of two distinct and separate periods; one part semi-solid, caseated, in a state of fatty degeneration; and another fluid somewhat decomposed, encompassing organic detritus, obviously of recent date.

The constitution reflected the effects of this state of things. Fever returned, and extensive decay of organic tissues became obvious. On motion of the joint crepitus was discovered. Exsection was recognized as the ultima ratio, and consequently executed, the head, neck, and part of the trochanter major, being removed on account of caries. The acetabulum was carefully scraped until the instrument disclosed bleeding bone structure. As soon as the dead structure had been separated from the living, the child rallied even faster than he had depreciated, and a month after the operation, the patient could be removed to his home. A year has since passed by. He has been as healthy and as sprightly as a lark. The wound

has long since firmly cicatrized, and half a dozen fistulous tracts have likewise closed. The present weight of the child is enhanced by thirty pounds; the former vigor has returned; the joint allows no inconsiderable motion in every direction, and defect in the length of the extremity is not great.

Up to a certain date, the patient has used crutches, the splint of Mr. Owen Hugh Thomas, of Liverpool, which exceeds, in its utility, all other mechanical means and measures, and had his extremity suspended by the other being mechanically raised. Lately, however, we have made an attempt at using the extremity for locomotion, without artifice, and have thus far received no rebuke. Fig. 2 illustrates the present status of the patient, from which the normal position of both pelvis and left extremity may be readily deduced.



FIG. 2.

During the last five years, we have performed but three exsections of the hip-joint, which, like the last, were unavoidable. The treatment of coxitis has been so materially improved, and rendered effective, that the contingency of exsection does not occur as frequently as in former years, particularly if the cases are submitted to proper treatment at an earlier stage.

FRacture OF THE NECK OF THE SCAPULA.

The last case is of more than ordinary interest. The right shoulder appears, on comparing with the left, flatter, the deltoid muscle being wasted, or, as it were, stretched, and below its insertion at the

humerus there is a deep and longer fold, or furrow, different in direction, length and depth on the opposite side. In measuring the distance of either shoulder from the spine, we notice that the right approximates more by about one inch, much more readily noticed in the gentleman than in the illustration. This change in the symmetry of the person was brought on by a fall, either upon or with the shoulder against some prominent object. The physicians called pronounced the case dislocation of the shoulder, with which its symptoms corresponded, reduced it by the ordinary methods, bandaged the arm to the chest, and kept the hand in a sling. Strange to say, the patient did not feel relieved; but on the contrary, the pain increased steadily along the brachial plexus. When, at last, the restraint was removed, the patient was unable to use the arm. Every attempt was accompanied by intensified pain, and even when at rest the extremity felt numb, and exhibited a different temperature. These symptoms had not perceptibly changed in six months, when the patient consulted us about his case. The symptoms indicated pressure upon the brachial plexus. The axillary cavity was materially diminished by swelling and intumescence; but no foreign substance could be discerned. The deltoid muscle is flat, and the acromion somewhat prominent; but the joint is intact, and moves normally, of course under pain; the extremity is, moreover, attenuated and almost powerless.

Now, it is evident that such symptoms do not follow a promptly reduced simple dislocation. We, at least, have never observed them, nor have others. Yet, we have no doubt that the physicians in attendance had palpable evidence of dislocation. Now, the question arises: "What anatomical derangement exhibits the same signs with dislocation, without its being the same? We can find no other than *fracture of the surgical neck of the glenoid cavity of the scapula*. In this fracture, the entire joint drops, and thus presents the exact symptoms of dislocation of the humerus into the axillary space, etc., viz.: Prominence and apparent protrusion of acromion; depression below the same; filling of the axilla by the head of the humerus and glenoid cavity; loss of function and pain. Very few surgeons think of anything else under such circumstances, and relieve the displacement. They are rather surprised at the speedy reduction, but give no heed to it; but when the pain persists, they gradually grow skeptical as to the correctness of their diagnosis. We have, ourselves, passed through this ordeal, and have learned by disappointment and sad experience, to be more careful in our diagnosis of dislocation. This candid admission of our own error will protect us against the suspicion of sinister intrusion. It is with a view of aiding our fellow-practitioner in the correct diagnosis, that we refer to this subject. Some surgeons have never met

with a fracture of scapula at its surgical neck, and naturally enough, deny their occurrence in toto. They are, indeed, rare; and when occurring, may be mistaken for dislocation. We had, altogether, four cases, including the present one. In one, we failed in the diagnosis, and when, at last, the actual truth dawned upon us, it was as in the present case, too late for correction. In two cases, we recognized the nature of the injury, and averted the otherwise inevitable consequences.—*Medical Brief.*

THE ONTARIO BOARD OF HEALTH.—The new Provincial Board of Health has already shown itself in earnest. It has issued a series of notices to municipalities and public bodies calling attention to its own and to their powers in health matters. It has circulated amongst school-teachers, ministers of religion, and others, very valuable advice on the prevention of epidemic disease, and it has asked for information from the various authorities as to the existence within their respective districts of by-laws as to the position and construction and position of wells, privies, water-closets, drains, etc., as to scavenging and other matters. So desirous is the Board of acquiring all available information as to disease prevalence, that it has prepared a series of cards on which medical practitioners are asked week by week to fill in the sickness records of their practices together with certain other information. This information, like that relating to infectious disease, will, it is evidently expected, be given without any fee, and we are bound to confess that in this respect the Board is expecting too much of the medical profession. That the information asked for is wanted in the interests of public health we do not for one moment doubt; indeed the lack of proper sickness returns is now universally recognized as a serious want in connexion with sanitary administration. But a public want should be met out of the public funds, and it is clearly unreasonable to ask that members of a busy profession should at the sacrifice of much valuable time, and without any fee or reward, supply a public body with information which will need to be carefully compiled. In England, medical officers holding Poor-law appointments are required, in virtue of their official position, to supply such information, but it has never been as much as suggested that a similar demand should be made of private practitioners. Indeed we know of no other profession to whom any such request would be made. One other very important initial step has been taken by the Provincial Board. It has deputed Dr. Covernton to visit this and other European countries with a view of learning the experience of the older established State Boards of Health. Dr. Covernton has spent some time in this country; he will attend

the International Congress of Hygiene at Geneva in his official capacity, and it is evident that he will carry back with him abundant materials for aiding his Board to arrive at decisions with regard to their future course of action. It would be well if our own Central Health Authority were in this respect to follow in the wake of the new Canadian Board. The experience of other countries, and especially that of some of the National Boards of Health of the United States, would, if it were acquired and properly compiled by skilled officers with a view to its being made use of in this country, afford in many respects most valuable aid to efficient sanitary administration.—*The Lancet.*

RESECTION OF THE HIP-JOINT.—Mr. George Cowell reported at the meeting of the Section of Surgery of the British Medical Association his experience in sixty-five cases of excision of the hip, in which his percentage of deaths amounted to ten per cent. His conclusions are:

1. Resection should be restricted to cases where there is distinct grating in the joint, accompanied by either pain or profuse suppuration, or failure of health.
2. It should be performed without loss of time, as soon as these conditions are recognized.
3. It is inadmissible in patients over eighteen years of age. All three of my older patients died with more or less prolonged suppuration, and without the slightest attempt at repair. I have never seen an adult patient recover from excision of the hip.
4. The younger the patient (my youngest patient was three and a half) the more satisfactory the result, and the more rapid the repair.

He now performs the operation antiseptically, and always removes the great trochanter with the head of the bone. By not postponing the operation, the acetabular mischief is usually slight. Both ends of the wound are closed with two silver sutures, a tube being inserted so as to keep the centre of the wound, opposite the acetabulum, open. He prefers Bryant's splint, and fixes the limb operated upon one inch shorter than the other. This extension is a matter of great importance, as he is convinced that the muscular contraction forcing the shaft of the femur against some part of the acetabulum is a frequent source of subsequent failure, and of undeserved discredit of the operation. In the last few cases, when possible, he has placed the children for the first few weeks in the prone position (face downwards), so as to avoid soaking the bandages with urine. He has tried this plan for too short a time to express any positive opinion with regard to it; but it answers its purpose exceedingly well, and is marvellously tolerated by the little patients.—*British Medical Journal*, August 26, 1882.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications collected on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAILLÉ, 16 Rue de la Grande Batelière, Paris.

TORONTO, NOVEMBER, 1882.

The LANCET has the largest circulation of any Medical Journal in Canada.

CANADA MEDICAL ASSOCIATION.

In an article in the October number of the *Canada Medical & Surgical Journal*, our contemporary, after taking credit to itself for having "always advocated the necessity of maintaining this society in an efficient condition, and rendering it thoroughly representative of medical progress throughout all sections of our country," affects great surprise that the LANCET "in its last issue uses expressions equivalent to saying that, up to the present time, the Association has been governed by those belonging to McGill College." Our contemporary has entirely misunderstood our meaning and misquoted our language; we never gave utterance to any such statement as the above quotation would seem to imply. What we did say was, "that owing to a feeling, *with which we have no sympathy whatever*, that the Association is being manipulated by McGill professors and their friends, the majority deemed it wiser to meet in Kingston," and concluded by expressing the hope that under Dr. Osler's skillful management the number of members would soon be doubled or even trebled—when it would have so outgrown its present proportions that it could no longer be said to be under the wing of McGill or any other college.

We venture to say that our contemporary will not deny that such a feeling as above alluded to, unfortunately does exist among certain members of the Association, and that it found public expression in the discussion that took place in regard to the next place of meeting. We yield to no one in our loyalty to the Association, or in our desire to

promote its highest interests and maintain it in an efficient condition, and would refer the reader to the past volumes of the LANCET in regard to our attitude in relation to it. But we are not deaf to the fact, much as we deplore it, that not a few have remarked, from time to time, that the Association was "run by McGill men," as it was tersely expressed. There can be no question "that, for several years past, Montreal men, and those connected with McGill especially, have been diligent in their attendance and have taken an active part in the proceedings;" and it is greatly to their credit that they have done so. They have performed what they considered a public duty, and we agree with our contemporary "that they should not be subjected to remarks calculated to render them so misunderstood as actually to appear to desire to control the Society in any way." We would also take this opportunity of saying that there is very little danger of the action of McGill College being misunderstood so long as no tangible ground is left for their opponents to base an accusation upon, and that no comments in the LANCET or any other journal can give existence to a feeling which is not founded upon fact. As we have already said, we have no sympathy whatever with the feeling expressed at the recent meeting. We do not believe that the McGill professors or their friends have any desire to control the Association but, in their zeal for its welfare, they may possibly, sometimes forget what is due to others who are equally interested in its prosperity, and thus their actions may be liable to be misconstrued. If we were disposed to be captious, we might, for example, point out that our contemporary, in its commendable zeal for the welfare of the Association, has taken upon itself, unsolicited, and without the sanction of the printing committee, the self-imposed task of printing the most important papers read at the recent meeting. These papers are the property of the Association, and are at the disposal of the printing committee; but this committee was never consulted, so far as we are aware, in regard to the disposition of the papers. Now, this may be zeal, but it is not discretion, and some one, "not well informed," might be imprudent enough to say that because our contemporary publishes the papers read at the meeting, it aspires to become the organ of the Association; and might give currency to the remark that not only were McGill professors endeavoring to

control the Association, but were also trying to make their "organ" the organ of the Canada Medical Association.

We also find our contemporary, of this city, with its usual bumptiousness, again obtruding its opinions *ex cathedra*, in the name of the profession of Ontario, "for whom we profess to speak." It seems anxious to pursue its congenial work of stirring up jealousy between rival schools. We repudiate entirely the insinuation that there is any jealousy between Trinity and McGill College; and so far as the Association is concerned, Trinity Medical College has not been disposed to hold itself aloof from contributing to its advancement. We would also take this opportunity of saying that whatever view may be taken of the statements in the LANCET, it is a gratuitous assumption to maintain that Trinity Medical College is in any way responsible for them.

TORONTO MEDICAL SCHOOLS.

The two Medical Schools in Toronto were reopened for the winter session on the 2nd and 3rd ult. The opening lecture of the session in Trinity Medical College, was this year delivered by Dr. Grasett, Professor of Medical Jurisprudence and Toxicology. After the usual preliminaries the lecturer gave a succinct account of the history of the school, tracing its lineal descent from the old Medical Faculty of Trinity University, and referred in eulogistic terms to some of the old professors, long since gone over to the majority, viz., Drs. Bovell, Hodder and Beaumont. He also alluded to the fact that medical science had advanced so much in a few short years, that while seven professors were sufficient then, thirteen are now required to do the work. A good general education was, he said, a prime qualification for the student, and all who could afford it, should avail themselves of a college course before commencing the study of medicine. He also advocated the establishment of a three month's course in the summer, for the study of the minor branches. He alluded to the appointment of an additional demonstrator of Anatomy (Dr. Teskey), and congratulated the Faculty on the selection of the lecturer on Physiology (Dr. Sheard), who had made this subject a special study. He emphasized the importance of

clinical work at the Hospital, and paid a high compliment to the Board of management of that Institution for its efficiency and its facilities for affording clinical instruction. He inculcated self-culture, and careful observation, citing as an incentive such examples as Jenner, Galvani, and others. He also cautioned them against the evil of intemperance, and defended them from the unkind aspersions sometimes cast upon them. In the practice of their profession he counselled diligence, industry, honesty of purpose, and correct habits, and especially the cultivation of sympathy for their patients. He concluded an excellent lecture by reminding them that they must not expect too much at first, but be content to toil on, and success would ultimately crown their efforts.

In the Toronto School of Medicine a new departure was inaugurated by the delivery of an opening lecture by Dr. Barrett. We have not space to do anything like justice to his address. The lecturer began by welcoming the students and friends who honored them with their presence. He then alluded to the high calling of the profession they were about to enter, and reminded them that wealth was almost unknown to those in the ranks of the medical profession, but a competency might be confidently looked forward to. Yet it had its allurements; these were the privileges of relieving suffering and of saving life. In the pursuit of the profession many opportunities were afforded for the manifestation of that mercy that is "twice blessed." He next spoke of the requirements necessary for those who embark in the study of the healing art. These were, a desire for knowledge for its own sake, mental culture, a high sense of morality, and the true instincts of a gentleman. He then passed in review as ensamples the lives and works of such men as Harvey, Wm. and John Hunter, Jenner and Simpson, and concluded a most eloquent address in the following words:—"You cannot have failed to notice that the prime discoveries thus hastily brought before you, viz., the circulation of the blood by Harvey, the greatly extended knowledge of anatomy by William Hunter, the ligation of arteries by John Hunter, the protective power of vaccination by Jenner, the use of anæsthetics by Professor Simpson, have all been achieved by sons of Britain. Surely as Englishmen, and the descendants of Englishmen, we may take a just pride in the honors gained by our an-

cestors, and may further trust in the belief that the energies, industries, and mental powers possessed by them have not been lessened in her sons simply by the fact of our having transplanted England's institutions, her laws, and her language to this western continent.

McGILL MEDICAL COLLEGE SEMI-CENTENNIAL.

The fiftieth anniversary of McGill College, Montreal, was celebrated on the 4th and 5th ult. by a *conversazione* and grand banquet tendered by the Dean and members of the Faculty to the graduates and friends of the Institution. The *conversazione* was held in the Redpath Museum, and was the occasion of the opening of the winter session of the Medical School. The grounds were brilliantly illuminated with Chinese lanterns, and the Museum and Lecture Hall were filled to overflowing with the youth and beauty of the city. The chair was occupied by the Hon. Charles Day, and beside him, the Hon. the Lieut.-Governor of Quebec—Dr. Robitaille, Principal Dawson and Ven. Archdeacon Leach. The opening address was delivered by the Dean, Dr. R. P. Howard, in which he entered upon a review of the Faculty since its inception fifty years ago. He sketched the lives of the four men who were the founders of medical teaching in Montreal, viz., Dr. Andrew Holmes, Dr. John Stephenson, Dr. William Robertson, and Dr. William Caldwell, and also paid a fitting and eloquent tribute to the memory of the late lamented Dean, Dr. Geo. W. Campbell. He concluded his very able lecture with a reference to the success which had been attained by the graduates of the College, and spoke of the needs of the Faculty, such as enlargement of the building, increased accommodation for the medical library, etc. He suggested the establishment of a fund in memory of the late Dean, to be called the "Campbell Memorial Fund," as a graceful tribute to the memory of a good man and an able physician.

The audience then repaired to the upper hall, and the *conversazione* opened. It was a most brilliant reunion, all the professions being fully represented.

The banquet which took place the following evening at the Windsor Hotel, was the crowning event

of the occasion. About 200 guests were present. Dr. R. P. Howard occupied the chair, while the vice-chairmen at the six smaller tables were Dr. Gardner, Dr. Roddick, Dr. Osler, Dr. Ross, Dr. Girdwood and Dr. Hingston. On either side of the chairman were his Honor. Dr. Robitaille, Lieut.-Governor of the Province, and Principal Dawson. Besides these, there were seated at the principal table representatives from all the leading Colleges in Canada, and many other prominent individuals. During the evening the 65th band added to the pleasures of the occasion by performing choice selections of music.

After the *menu* had been thoroughly canvassed the chairman called the meeting to order, and Dr. Osler, the Secretary, stated that he had received a number of letters and telegrams expressing regret that the senders could not be present.

Messages of congratulation were received by telegram from the College of Physicians and Surgeons of Chicago, and from the Professors and Students of Trinity Medical College, Toronto. The latter especially was received with the most enthusiastic applause. The usual loyal and sentimental toasts were then proposed and enthusiastically received. The toast of the "Lieut.-Governor" was responded to by his Honor, Dr. Robitaille, who is a graduate of the College; "The Principal of the University" by Dr. Dawson, the "Sister Universities" by Dr. Chadwick, for Harvard; Dr. Buckham, for Vermont University; Dr. Rottot, for Laval; Dr. F. W. Campbell, for Bishop's University; Dr. Workman, for the Old Medical School of Toronto; Dr. D'Orsennes, for Victoria Medical School, and Dr. Covernton, for Trinity Medical College, Toronto. "Our Graduates" was ably responded to by Dr. Grant, of Ottawa. "Our Sister Professors." "The Medical Faculty of McGill." "The Four Founders." "The Montreal Hospital," etc., completed the list of toasts, and a very pleasant entertainment was brought to a close.

We congratulate the Faculty of McGill College upon the substantial evidence of success which has attended their labors in the past, also upon the éclat of their semi-centennial celebration, and heartily wish them a still greater degree of prosperity and usefulness in the second half century upon which they have entered.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of this College was held in Quebec on the 27th of September. Dr. R. P. Howard, of Montreal, President, in the Chair. There was a large attendance of governors present. After reading the minutes of last meeting, a resolution was passed respecting the death of Dr. Geo. W. Campbell, one of the original members of the College. The following gentlemen were admitted to the study of medicine :—J. H. Darey, L. V. Benoit, A. Kinloch, H. Hervieux, J. D. Fontaine, L. S. P. Normand, P. W. Garneau, A. Mallett, J. Legault, A. St. Amour, A. Laval, D. McNamara, G. B. Tanguay.

The application of Dr. Keyes, of Georgeville. Que. for registration was refused, on account of his being an Eclectic.

The following graduates received the licence of the College :—Drs. A. Herbert, E. Laberge, J. V. Coté, G. A. Casgrain, T. W. Mills, W. DeMoulié, C. O. Brown, and L. J. Lennox.

Certain statements having been current to the effect that private examinations were given by professors of a medical school in the Province of Quebec, recognized by the College, and that on these examinations certificates were issued purporting that the bearers were entitled to a diploma, and were, in fact, medical practitioners, a committee was appointed to make an investigation into these statements, and report at the next meeting of the Board. The reports of the Treasurer, and the Detective Officer were received, and a new medical tariff was submitted.

ONTARIO BOARD OF HEALTH MAP.—We have received weekly editions of a map published by the Ontario Board of Health. In this map the Province is parcelled out for purposes of comparison into ten districts, represented in different colors, the comparisons being based upon differences in geological formation and meteorological conditions. The names of the diseases and their degree of prevalence in the different districts are given in printed spaces. For our own part we do not see the necessity of issuing weekly editions of this map. It is very well in its way for reference, but a weekly issue is certainly a most useless and extravagant waste of money. The information given is necessarily of the most meagre description, being chiefly confined to an enumeration of six of

the most prevalent diseases in each district. It would be infinitely better and cheaper, to issue printed slips every week giving more complete information in regard to prevalent diseases. It is deeply to be deplored, that while there appears to be plenty of funds for the publication of weekly maps, there is not a farthing to expend for the information received from the members of the medical profession, without which data, the map would be of no service whatever—a mere daub of colors without either geographical correctness or artistic beauty.

A WELL-MERITED RECOGNITION.—The following address was presented to our esteemed confrère and fellow citizen, Dr. Workman, by the Médico-Chirurgical Society of Montreal, at a meeting held on the 6th of October, 1882.

DR. JOSEPH WORKMAN,

SIR,—The members of the México-Chirurgical Society of Montreal, in session this evening, cannot allow the opportunity to pass of expressing to you the pleasure your visit has been to them. They feel that to you the Medical Societies of Canada owe much; your zeal and ability having always been liberally expended in promoting their welfare, and they desire to express the hope that you may be spared for many years to give them the benefit of your wisdom and counsel.

A. HENDERSON, M.D., GEO. ROSS, M.D.
Secretary. President.

We congratulate the Dr. upon this substantial token of recognition of his valuable services in the direction indicated, and heartily join in wishing him long life, and much happiness in his labor for the benefit of the profession.

PERSONAL.—Dr. Phelan, of Kingston, is about to visit the hospitals of Europe to further pursue his medical studies. He expects to be absent about a year. It will also be seen by reference to the Report of the Huron Medical Association, that our friend Dr. Stewart, of Brucefield, is going to Vienna to spend some time in professional pursuits. We commend the action of these gentlemen to all who have the means and leisure to avail themselves of so agreeable and beneficial a holiday trip. There is much valuable information to be gained by an occasional trip to the old world.

Mr. J. Knowsley Thornton, of London, Eng., the ovariologist, was in Toronto during the first week of October, and was present at the opening lecture of Trinity Medical College.

We are glad to be able to announce that Dr. J. C. Tache, Deputy-Minister of Agriculture, who was seriously injured in March last, is again able to be about. It is said he contemplates withdrawing from the service shortly.

We are also pleased to learn that the Hon. Dr. De St. George, of Quebec, has so far recovered from his serious illness as to be able to resume his practice.

Dr. M. Sullivan, of Kingston, is mentioned as the probable successor to the late Hon. John Hamilton, senator of the Dominion of Canada.

MALPRACTICE SUIT.—Some time ago we stated in these columns that a malpractice suit had been instituted against Prof. McLean, of Ann Arbor, by one of his patients. This case was tried recently at the United States Court in Detroit, Mich. The Plaintiff, a Mrs. Hayes, consulted the Dr. for the cure of a recto-vaginal fistula. He advised and performed the operation of incision, as in fistula in ano, but the parts did not unite, and subsequent operations to restore the perineum also failed, owing to the bad health of the patient. Three experts were called to testify on each side, and, as is too frequently the case, each took a one-sided view of the question. The judge, in his charge, said that notwithstanding the defendant had promised to cure his patient, he could not be held accountable for failure, as the law did not recognize a promise to cure. He could only be held accountable for ordinary skill. The jury disagreed, eight being for the defendant, and four for the plaintiff. Dr. McLean, in this case, had the active support and sympathy of the most eminent medical men in Detroit. His many friends in Canada will also be pleased to hear of his verdict of acquittal.

HORSFORD'S ACID PHOSPHATE.—This Acid Phosphate recommends itself to the profession, particularly in all cases arising from a debilitated condition of the system in nervous diseases, and where the waste of the phosphates is greater than the supply. The importance of such a remedy to the profession has been clearly established by such competent authorities as Prof. Wm. A. Hammond,

Drs. Fordyce Barker, W. H. Van Buren and others. Prof. R. Ogden Doremus states that the greater proportion of phosphates in urine after excessive mental labor has been clearly established by chemical analysis, and to repair this waste Dr. Hammond affirms that he habitually uses phosphoric acid and the phosphates. There are few preparations that perform the work more thoroughly, and at the same time are so pleasant in administration as the Acid Phosphate.

THORACO-PLASTIC OPERATION.—Dr. Fenger, of Chicago (*Med. News*), has recently performed Estlander's operation of exsection of some of the ribs, to allow of collapse of the chest-walls in a case of empyema. The patient, a girl 16 years of age, had suffered from empyema for three years, and there remained a fistulous opening which refused to heal. The empyema cavity was two inches long, one and a-half inches high and about an inch deep. The 4th, 5th and 6th ribs were removed opposite this cavity to the extent of six centimetres in length. This permitted of closure of the cavity and the patient made a good recovery.

TURPETH MINERAL IN CROUP.—The use of the yellow sulphate of mercury (Turpeth Mineral) in cases of inflammatory croup has come to be regarded as the most satisfactory remedy yet employed in this affection, especially when administered early. Dr. Fordyce Barker, of New York, insists upon the early administration of the drug, and states that for twenty years past he has not lost a case when seen sufficiently early—in the incipency of the attack. He advises the families of which he is the medical attendant, to keep Turpeth Mineral powders in three grain doses always at hand, and to give one as soon as the earliest symptoms manifest themselves.

TENDON REFLEX IN LOCOMOTOR ATAXIA.—Dr. James Leslie, of Hamilton, Ontario, gives an account (*N.Y. Med. Record*) of a case of locomotor ataxia in which the patellar tendon-reflex was very distinct. The patient was a shoemaker, aged 45 years. There were no fulgurating pains, but the symptoms of inco-ordination without loss of muscular power were well marked. Daily forcible flexion of the thighs upon the abdomen was attended with much benefit.

PERMIT TO PRACTICE IN ONTARIO.—A correspondent asks "if the President of the College of Physicians and Surgeons of Ontario can give a permit to practice medicine to one who is not registered either in Great Britain or Ontario." In reply we would say that former Presidents have granted permits in certain cases, but the legality of such may be called in question. There does not appear to be any power given in the Act to grant permits, and so far as we are aware, the present incumbent has not granted any.

REMOVAL WITHOUT CAUSE.—We regret very much to learn of the removal of Dr. F. P. Taylor from the position of surgeon to the Marine Hospital, Charlottetown, P. E. I. Dr. Taylor has been for nine years surgeon to this institution and was a most competent and economical officer. His removal was occasioned by some change in the Governmental arrangements in regard to the Hospital, and casts no reflection upon the Dr.'s efficiency or qualification for the position.

E PLURIBUS UNUM.—A Chicago physician recently delivered a woman of a fine healthy baby. The mother was on her way from Boston to her home in St. Louis when she was taken ill. In the form for return of births enforced by the board of vital statistics for Illinois, the physician is required to state who is the father of the child. This it appears was a puzzler for both mother and physician, but the latter satisfied his conscientious scruples by filling in the blank with *E pluribus unum*.

TORONTO HOSPITAL IMPROVEMENTS.—A new convalescent department is now in course of erection in the grounds of the Toronto General Hospital. The building is two storeys in height with a large verandah on the south, and a conservatory on the west side. This addition has been in contemplation by Dr. O'Reilly for some time past, and mainly through his efforts the funds have been secured from private citizens. We congratulate the worthy Superintendent upon the success which has attended his efforts.

INSUFFICIENTLY PREPAID.—Mr. Hazen Morse of this city, desires us to state that through some misunderstanding, a number of circulars were mailed to members of the profession which were insufficiently prepaid. He regrets very much that

this occurred, and begs to apologize for the caused annoyance and unnecessary expense, to those to whom the circulars were addressed. It is needless to say that it was entirely unintentional on his part.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.—At the annual meeting of the above-named Society, held on the 6th ult., the following gentlemen were elected officers for the ensuing year: *President*, Dr. R. A. Kennedy; *1st Vice*, Dr. T. G. Roddick; *2nd Vice*, Dr. T. A. Rodger; *Secretary*, Dr. Henderson; *Treasurer*, Dr. W. A. Molson; *Librarian*, Dr. D. F. Gurd; *Council*, Drs. F. W. Campbell, Osler and Geo. Ross.

THE LONDON MEDICAL COLLEGE.—The newly established Medical Department of the Western University of London, Ontario, opened its first session on the 2nd ult. The attendance of students though not large is considered satisfactory as a commencement. Fifteen students enrolled themselves at the opening and the number is probably increased by this time to 20 or 25.

REMOVAL.—Dr. Henry Harkin, of Guelph, Ont., has removed to Montreal, to enter upon practice. Before leaving he received a handsome testimonial from his many friends in Guelph.

Dr. W. Young has returned to Montreal, Que., after a residence of several years in Hong Kong.

Dr. C. M. Stevenson has removed from Barnston to Coaticook, Que.

APPOINTMENTS.—Dr. R. P. Howard has been appointed Dean of the Medical Faculty of McGill College, Montreal. We congratulate the Dr. upon his elevation to the highest office in the Faculty.

W. D. Morrison Bell, M.D., of Ottawa, has been appointed assistant surgeon to the Governor General's Foot Guards, *vice* Dr. W. R. Bell, who was recently appointed surgeon to the Ottawa Field Battery.

Dr. F. W. Campbell has been elected acting Dean of the Medical Faculty of Bishop's College.

Dr. J. Leslie Foley has been appointed attending physician to the Montreal Dispensary.

CORONERS.—Andrew Grant, M.D., of Beaverton, Ont., has been appointed Coroner for the Co. of Ontario. Dr. Gray, of Perth, Ont., has been appointed Coroner for the Co. of Renfrew.

DEMISE OF THE U. S. HEALTH BULLETIN.—The *National Health Bulletin* of the United States has been discontinued, Congress having refused to grant the appropriation needed to defray its expenses. In future *The Sanitary Engineer*, New York, will print weekly, the information heretofore published in the *Bulletin*.

A RARE CASE.—Dr. Hingston, of Montreal, recently removed an ovarian tumor from a child two years of age. Such cases are sufficiently rare to render them most interesting from a professional point of view. The little patient was doing well at last account.

It is rumored that Dr. Lett, Assistant Physician to the Insane Asylum, Toronto, and Mr. Langmuir, formerly Inspector of Asylums for Ontario, are about to establish a private asylum for insane in Guelph, Ont.

The death of Mr. J. T. Clover, F.R.C.S., of anæsthetic fame is announced in our British exchanges.

Dr. Oliver Wendell Holmes is about to resign the professorship of anatomy in Harvard Medical College, which he has so long adorned.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY for November, 1882. New York: D. Appleton & Co. Fifty cents per number, \$5 per year.

The number of this popular Magazine for November is to hand. Dr. Frank H. Hamilton opens with a valuable article on the important subject of "Sewer Gas." He says, "What has been called 'sewer-gas' is composed of air, vapor, and gases in constantly varying proportions, together with living germs—vegetable and animal—and minute particles of putrescent matter." He indicates the only safe ground to take in regard to it, and quotes Dr. Willard Parker, as saying, "if he were to build a house, he would not have it connected in any way with a sewer but would construct a sort of annex into which he would gather all the pipes and fixtures, water-closets, baths, and wash-basins." The following excellent papers will also be found in this number—Professor Du Bois-Reymond, on

"The Science of the Present Period"; Dr. Nathan Allen on "The Law of Human Increase"; "Science in Relation to the Arts," an address by Dr. Siemens, President of the British Association for the Advancement of Science; Dr. Oswald's second paper on "Physiognomic Curiosities"; "Scientific Farming at Rothamsted," by Dr. Manly Miles; "Who was Primitive Man?" by Prof. Grant Allen, and several others of equal interest.

ON SLIGHT AILMENTS, THEIR NATURE AND TREATMENT, by Lionel S. Beale, M.B., F.R.S., King's College, London. Second edition, enlarged and illustrated. Philadelphia: P. Blakiston, Son & Co. Toronto: N. Ure & Co. Price \$1.35.

This new revised edition is published simultaneously with the London edition. The author in his introductory chapter on tact and treatment, gives his readers a very good article on quackery and medical humbug, in which he points out the proper conduct of the intelligent and honest physician in the face of such opposition. He specially emphasizes the importance of paying careful attention to the slight ailments, the treatment of which should be conducted on the same principles as that of serious diseases. The author gives many useful hints and directions in the treatment of ailments of every day occurrence, that are not to found in the ordinary text books. We cordially commend the work to our readers, feeling certain they will be pleased and benefited by a perusal of its contents.

THE INDEX CATALOGUE of the Library of the Surgeon-General's Office. Vol. III. Washington: Government Printing Office.

This volume, which is uniform in size and appearance with its predecessors, brings down the alphabet through D. It contains 9,043 author titles, 8,572 book titles, 28,846 journal articles, and 4,335 portraits under the heading of collection of portraits. One of the most striking features of the volume is the very large number of pages covered by the subject of Asiatic cholera—148 pages. Cinchona and its derivations cover five pages and a-half. The labor entailed upon the preparation of these volumes is something enormous.

JOURNAL OF CUTANEOUS AND VENEREAL DISEASES. Issued monthly at \$2.50 per annum. Edited by Henry G. Piffard, A.M., M.D., and P. A. Morrow, A.B., M.D. New York: Wm. Wood & Co., publishers.

We have just received the first number of this new and interesting periodical. It gives promise of great usefulness and value. The present number contains 32 pages of reading matter of excellent character and variety. Among other articles may be mentioned an interesting case of Trichophytosis Cruris, by Geo. H. Fox, M.D., accompanied by a beautifully executed colored plate, illustrating the case in question.

NITRO-GLYCERINE AS A REMEDY FOR ANGINA PECTORIS. By Wm. Murrell, M.D., M.R.C.P. Lond.; Lecturer on Materia Medica, etc., at the Westminster Hospital, London, Eng. Detroit: Geo. S. Davis, Medical Publisher.

The object of this work is to give directions for the administration of nitro-glycerine as a remedy for angina pectoris. The principal points are illustrated by reference to cases under the author's care. Some of these cases have already been published in the London *Lancet*.

A PRACTICAL LABORATORY COURSE IN MEDICAL CHEMISTRY. By John C. Draper, M.D., LL.D., Prof. of Chemistry in the University of New York. W. Wood & Co., publishers.

This little volume will be found exceedingly useful and convenient for the student of practical chemistry. It is so arranged as to be useful also as a note book, having every alternate page blank for this purpose. All the various tests for organic and inorganic poisons and animal fluids are given in full, also those for the examination of impurities in water, milk, etc., besides a section on sediments and calculi. It is of convenient size for carrying in the pocket.

THE PHYSICIAN'S VISITING LIST FOR 1883, (Lindsay & Blackiston,) 32nd year of publication. Philadelphia: P. Blackiston, Son & Co.

We gladly welcome the new edition of this Visiting List. It has been before the profession for nearly a third of a century, and notwithstanding the issue of a number of works of a similar character, it still holds its ground as a convenient and useful pocket companion. It has many imitators, and but few, if any, superiors.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Volume VI. for the year 1881. Philadelphia: Henry C. Lea's Son & Co., 1882.

This volume of 542 pages is a most substantial work, and attests the high status of gynecology in America. It contains nineteen excellent papers, with accompanying discussions, and an index to the gynecological literature of all countries for 1880. We commend it to our readers.

A MARVEL OF SURGERY.—Dr. Roswell Park, writes from Prague: I have had the pleasure of a rather extended interview with a patient whose larynx and epiglottis Prof. Gussenbauer removed over two years ago. Six weeks after the operation, he began to wear part of the artificial larynx, and, after accustoming himself to this, he gradually learned how to introduce and use the reed which takes the place of the vocal cords. This apparatus was made for him by Rothe, who has also done some work for the Reese Hospital. The patient is a riding teacher, is reputed the best rider in Prague, is busy from morning to night, talking all day, and suffers not the slightest inconvenience or pain. His voice is, of course, very monotonous, but his enunciation is excellent, his speech perfectly intelligible, and he eats and drinks with perfect facility. Three intralaryngeal operations had been previously made, before Gussenbauer attempted his feat. This case is said to be the best living example of what the art of the surgeon and the mechanic can accomplish for such a terrible disease as cancer of the larynx.—*British Medical Journal*.

A century ago John Hunter divided all skin diseases into three classes; one of which is cured by mercury and the iodides, a second by sulphur, and a third class which the devil himself can't cure. Dr. L. P. Yandell, who quotes Hunter as above, is given credit for a much less complex classification than even this. He attributes all skin eruptions to malaria. Quinine is a specific for malaria, ergo, quinine is the remedy for all skin eruptions.—Q.E.D.—*Michigan Med. News*.

The Sultan of Turkey has given a site in Jerusalem for the purpose of erecting a hospice and ophthalmic dispensary, under the auspices of the English branch of the Order of St. John.

Births, Marriages and Deaths.

In St. John, N.B., on the 9th ult., W. F. Coleman, M.D., to Mary Winniett, youngest daughter of the late J. Hammond Hutt, Barrister-at-Law.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

VOL. XV. TORONTO, DEC., 1882. No. 4.

Original Communications.

QUINQUINIA VS. QUININE AS AN ANTI-PERIODIC.

BY G. T. MCKEOUGH, M.B., M.R.C.S.ENG.; L.R.C.P.ED.;
F.O.S.LOND.; CHATHAM, ONT.

Quinquinia is a preparation said to contain 15 per cent. of quinine, the remainder of the preparation consisting of the other alkaloids of cinchona bark in their natural combination: quinidia averaging 15 per cent., cinchonidia 15 per cent., cinchona 25 per cent., chinoidine 30 per cent., and for which is claimed therapeutical properties equal to quinine, "grain for grain," with certain material advantages, viz.: the absence of symptoms of quinine during its administration, and the cheapness of the drug as compared with quinine. The specimen of the preparation which my partner Dr. Holmes received, has been administered by us to twelve patients. A short record of the results I thought might be interesting to the profession, especially to those practising in malarious districts who have not as yet given it a trial.

No. I. F. W., male, aged 44. Had general malaise with loss of appetite and high colored urine for several days, but continued following his usual occupation until the morning of the fourth day of his not feeling well, when he had a heavy chill followed by fever, headache and pains in his limbs and back; he was compelled to go to bed and sent to me for a bottle of ague medicine. I sent him twenty grains of quinquinia to be divided into ten powders and one to be taken every two hours, with a purge of rhubarb and calomel. On seeing him a few weeks afterwards he informed me that the medicine had cured him; that there had been no return of the ague; and he was glad I had "at last found a medicine that would cure ague without having any quinine in it," the quinquinia

not producing the usual symptoms of cinchonism which quinine always produced in his head to a marked degree.

In a malarious district one not infrequently meets with cases similar to this, in which without the administration of any anti-periodic there is no return of the paroxysm, the malarial poison seeming to be eliminated after a single attack, apparently spontaneously. This might have been such a case and no credit due to the quinquinia for the favorable termination of the disease.

No. II. Sept. 12th. A. M., female, aged 56. Has had tertian ague for a week past, in all, four paroxysms. Prescribed 30 grains of quinquinia—3 grains every two hours. She commenced to take the medicine at one o'clock upon the fourth apyrexial day of the attack, the fifth paroxysm was expected the following morning about ten o'clock, but she escaped it, the remedy having been taken regularly as directed. We could scarcely expect more from quinine, probably a smaller quantity would have produced the same result. The ague returned in a fortnight, when 30 grains of quinine were ordered and broke it, quinquinia not being obtainable, our supply having become exhausted. She had no return of malarious symptoms when last seen, one month after her last attack. Whether quinine has superior prophylactic properties to quinquinia in malaria, my experience with the drug is too limited to state. This case would favor quinine as giving greater immunity to subsequent expressions of malaria.

No. III. F. J. G., female, aged 37. Was seen on the evening of Sept. 13th; complained of chilliness with headache, particularly over the left brow, pains in the limbs, no appetite, languid and tired. Temp. 101° F., pulse 100. The day previous she was quite well. Ordered 30 grains of quinquinia—3 grains every two hours. When seen the following evening her symptoms had not improved; there was some relief from the pain during the morning, but it increased in severity during the afternoon. The quinquinia having all been taken and my experience being so limited with the preparation, I did not feel justified in continuing its use any further. Knowing that quinine would certainly restore the patient in a few days to health, 36 grains of sulphate of quinine were ordered and the patient was well in a couple of days. If I had had the same confidence in

quinquina as I had in quinine and continued its use, the patient might have recovered as rapidly under the entire use of quinquina, as it must be remembered that similar cases do sometimes require one drachm or more of quinine to effect a complete cure.

No. IV. Sept. 15th. F. D., female, aged 20. Two weeks ago had an attack of intermittent fever, for which she took 30 grains of quinine and recovered. Since then she has been taking liquor arsenicalis and liquor ferri dialyzati, partly for anæmia and partly as a prophylactic, having become somewhat anæmic from a succession of attacks of acute malaria. She has been feeling tolerably well since her last attack until this morning, when she lost her appetite, urine high colored, feeling of fatigue and languor, has chilly sensations. I saw her about 3 o'clock when 30 grains of quinquina were prescribed, to be taken in the course of the afternoon and night. She took the remedy faithfully, hoping to ward off the expected paroxysm but without the desired result, as the following morning she had a chill with fever and sent for some quinine, regretting very much that the other medicine did not cure her, as it did not make her "head ring and buzz" like quinine. She had no subsequent paroxysm after taking 30 grains of quinine.

No. V. J. T., aged 27, male. Tertian ague. The usual symptoms, together with a foul breath and thickly furred tongue. Ordered 30 grains of quinquina and a purgative. He returned to our office in three days, stating that he had had no return of the fever, but his appetite had not returned and he had a "bad taste in his mouth." He was ordered a mixture of rhubarb, bicarbonate of soda and infusion of colomba, and when I last saw him a few days ago, he informed me that he soon regained his usual health and had no return of ague.

No. VI. G. S., male, aged 30. Has had attacks of malaria all summer. Came to our office on the 20th of Sept., complaining of his bones aching, loss of appetite, fatigue and languor, inability to work, no rise of temperature. Gave him 30 grains of quinquina, and on the second day after commencing to take the prescription, he returned to work, feeling as well as usual.

No. VII. Sept. 27th. L., aged 11. Has been suffering from ordinary intermittent malarial symp-

toms for two days, with slight rise of temperature. Prescribed 20 grains of quinquina—2 grains every two hours, which produced some relief from the aching and slight lowering of temperature. The prescription was repeated and made a complete cure.

No. VIII. Sept. 27th. Mrs. R.'s baby, aged 2 years. Has had ague every alternate day during the past week. Ordered 10 grains of quinquina—1 grain every two hours. No return of ague.

No. IX. G. J., aged 60, male. Has had two paroxysms of quotidian ague. 30 grains of quinquina in four doses stopped the attack.

No. X. Sept. 29th. C. C., aged 32. Brow ague. Has had severe pains over his left brow every afternoon for the past four days. After taking 30 grains of quinquina there was no return of the pain.

No. XI. Sept. 30th. A. McC., aged 24. Has been suffering from remittent fever for several days. Has taken 2 grains of sulphate of quinine every two hours since the beginning of his illness, in all about $2\frac{1}{2}$ drachms. The symptoms of quinism having become so distressing to the patient, I omitted the quinine and substituted 2 grains of quinquina every two hours. He felt very grateful for the change, as "the deafness and buzzing in his ears" soon ceased. The fever abated on the second day after commencing to take the quinquina, the ninth day of the disease. It is difficult, if not impossible to determine the relative value of the two drugs in this case. I think it is doubtful if either the quinine or quinquina had much influence in arresting the disease, the case probably being one of those types of remittent fever, described long ago by Cleghorn in his work on the "Epidemic Diseases of Minorca," which terminate spontaneously on the ninth day.

No. XII. T. R., aged 19, male. Complained that every other day for a week his bones ached, felt greatly fatigued and it was with difficulty that he performed his usual manual labor. He had no chills and when I saw him on one of his sick days, there was no rise of temperature. 36 grains of quinquina—4 grains every three hours, restored him to health.

I think I may safely say that from the results of its use in the above cases, it merits further trial. As a tonic I have no experience with it, but as an

anti-periodic remedy, I doubt not it will prove as trustworthy and as reliable as quinine, "grain for grain." On the whole, its limited use in our hands has been satisfactory. That 30 grains of quinine will cure an attack of typical tertian or quotidian ague, there seems to be no doubt. Whether it will prove as useful in less typical and more obscure malarial affections, I do not know. One decided benefit it has over quinine is, the absence of any of the unpleasant symptoms of cinchonism in the quantities in which we prescribed it, an advantage which will assuredly be appreciated by the quinine taking public. As to the mode of administering it, the preparation being of a gritty sandy consistence, does not mix well with water, minute particles getting into the crevices of the teeth, causing the taste—which is intensely bitter—to be retained in the mouth for some time. If the patient can swallow a capsule or small wafer pellet, this will be found the preferable mode, otherwise rubbed up with pulv. acacia, elixir tarax. co. and syr. gaultheria, a not very unpalatable mixture is compounded. The remedy being apparently a useful one, especially so long as quinine remains as high priced as it is at present, it is to be hoped that the manufacturer will not permit of its adulteration.

DISLOCATION OF THE ELBOW.

BY W. S. CHRISTOE, M.D., FLESHERTON, ONT.

The article by Professor Dupuis on this subject, in your last issue, was, in my opinion, in keeping with the facts. He says: "The diagnosis of injuries of the elbow-joint are admittedly difficult. The complicated nature of the joint, the number of epiphyses about it, which may be separated from their bones, especially in childhood, and the swelling which generally so quickly supervenes, all conspire to obscure the real nature of the injury, and to leave the inexperienced surgeon in doubt as to the character of the lesion before him, and hence unable to pursue the proper line of treatment."

Such is really the experience of surgeons, who have cared sufficiently to note, and have been honest enough to declare them. I confess the diagnosis of lesions of this joint has been frequently most embarrassing in my own experience ;

it is not surprising then, that Professor Dupuis' sentiments command the heartiest endorsement. It brings forcibly to my mind some such cases ; in numbers, however, a country physician is placed at a disadvantage, as the population is sparse, and such accidents seldom occur.

Case I.—Was a young married man, whose elbow was dislocated, and from the history given of the case the lesion comprised displacement of both bones of the fore-arm. When the patient was seen by me, four weeks after its occurrence, the limb could not be flexed to permit the finger to touch the lip with whatever force. Upon examination, the ulna was properly adjusted, but the head of the radius upon flexion impinged on the anterior surface of the humerus. There was no doubt at all but what the proper means were used to reduce this dislocation and the ulna successfully reduced, but the radius had been inadvertently overlooked by the operator. With the use of anæsthetics and pulleys, it was remedied, but partially, and to this day there is an unpleasant embargo upon the free action of the joint. It taught a lesson, viz., hereafter to look sharply after all the members of the joint.

Case II.—Was a lad who fell and injured the elbow. The nearest medical man was called, who diagnosed it as dislocation, and accordingly herculean extension and counter-extension were made ; again and again it was tried, but the reduced bones would not stay in place. The medical attendant then suggested chloroform, but having no anæsthetic, he brought the patient to my office. Upon placing my finger and thumb on the condyles of the humerus, I found complete mobility of the joint, and could flex the forearm well on the humerus, which could not be done if dislocation were present. The lesion proved to be a fracture of the lower fourth of the humerus. Having an angular splint, adjustable, one half was immediately applied to the fore-arm, then a little extension, and the limb brought to rest in the other half of the splint, without much pain. It was successfully set and made a good recovery.

Case III.—Was another young lad whom his parents said had fallen and struck his elbow. The joint was very much swollen, but at this time there was complete mobility, the arm could be bent to any angle. It was placed in a sling and a lotion applied to reduce the excessive swelling, with in

structions to bring the child again shortly, but it was not seen again for two weeks. The joint's action was materially interfered with now, resulting from retained position and the discovered lesion present. Upon examination of the joint carefully it seemed to be all right, as by slight force the arm could still be bent at an acute angle, and he could touch his lips unaided with the forefinger, but the joint evidently was not natural. What, then is the lesion? The ulna and the radius occupy their proper places, but compared with the sound elbow it is wider and sharper to the touch internally, and there seems to be a slight depression between the shaft of the bone and the inner condyle. Putting these together undoubtedly the diagnosis is a separation of an epiphysis, or if you please a fracture of the inner condyle. Now its condition made it impossible to diagnose exactly at first, and before it was again seen it was too late to attempt adjustment, if indeed it could have been at all, inasmuch as it is always a matter of doubt after the lapse of so much time. The object was to secure as much action as possible, not forgetting that the most carefully treated cases leave but a limited action, to accomplish which passive motion was ordered, even to bending the elbow at an acute angle occasionally, but the case did not progress to suit, and therefore was taken to another practitioner. Strange to say, his diagnosis was dislocation, and the poor little fellow had to undergo a process of extension and manipulation of a very painful character. Of course, if his ideas were correct it would require it after the lapse of four to five weeks. After this treatment, "It wasn't exactly as he would have liked it," he said, "but if he had got the case from the beginning, he could have made a good job of it." The arm was put in splints for *two* days, then treatment as directed by myself substituted, thus unwillingly evidencing against his own expressed diagnosis, for surely no man in his senses, would, after powerful extension and successful reduction, limit the application of the splints to two days, or grant such freedom of action.

Since the foregoing was written, the case has again come under my notice, and upon the closest scrutiny, no difference in the joint can be detected. The fragment is still there, but comparatively firm. The joint is wider, but as union has gone on strength has returned, and the lad can use it more

dexterously. The arm hangs at an obtuse angle, but will improve by suspending weights daily. He can place his hand to his nose, and upon the whole the recovery is not bad.

Case IV.—Is recent and is now under treatment. This is a lad too, five years of age, who was pushed from the railing of a bridge backwards, struck his elbow and dislocated both bones posteriorly. The points mentioned by Professor Dupuis were very prominent here. Being a nervous, irritable lad, it was thought advisable to give him a little ether and chloroform. This done, extension and bending the elbow firmly over my fingers, reduced it immediately. An angular splint and bandage with arm carried in a sling, completed the procedure, and the case is progressing very favourably. By using passive motion occasionally, very soon no one will know that the accident ever happened to him.

To sum up then, on presentation of such injuries, the difficulties should be remembered, and criticisms on other's actions should be sparingly expressed. Where there is the slightest doubt, consultation should be had, and whether doubt or not the examinations should be for the first week frequent. One should never misrepresent a case for the sake of a little popularity, such cannot be honorable and will surely return in some shape. The best of us are liable to errors, it is only humanity repeating itself—"To err is human."

ON PLACENTA PRÆVIA.

BY W. O'DELL ROBINSON, M.D., ST. JACOBS, ONT.

I send you a brief report of the following cases which may interest your readers, and also show the various forms of cases one is called upon to treat from time to time.

CASE I. Feb. 2, 1880. Mrs. H. had nearly reached the seventh month of gestation, when I was summoned in great haste to see her. The hemorrhage was profuse, which, however, I succeeded in controlling by the usual palliative measures. There was no return of the hemorrhage for about four weeks, when I was again summoned. I found her in a very exhausted and weakened condition. Immediate action was called for. I at once introduced a piece of soft cotton, saturated with vinegar, and used it as a plug. I then gave

her a dose of ergot, and after this had been repeated a few times the flowing began to diminish. I now made an examination and found the placenta attached over the inner os; the presentation was a breech. A messenger was despatched for Dr. Passmore, of Conestogo, to meet me in consultation. By the time he arrived the flowing was very well controlled, the os was beginning to dilate, and we concluded to let the labor go on until the os was dilated sufficiently to allow of the separation of the placenta, which we did. I then introduced my hand, seized the foot and delivered the body. When the head became engaged in the inferior strait, all the traction we could make was of no avail, so I concluded to try other means, and for this purpose introduced the blunt hook, made it secure in the superior orbital surface of the maxillary bone and by strong traction delivered the head. The woman made a slow but good recovery.

CASE II. Feb., '81. Mrs. K. This case was similar to the first, with the exception that it was a head presentation. I adopted the same plan of treatment as in the first case, but continued it for a longer period. When the symptoms became alarming, Dr. Ulliot, of Elmira, was summoned to assist me. We at first thought of giving chloroform, but owing to the prostrated condition of the patient we concluded to deliver if possible without its administration. I then introduced my hand, well oiled, seized the foot, after some little difficulty, turned and delivered. There were some symptoms of metritis, which lasted only a few days; the woman made a good recovery.

CASE III. April, '82. Mrs. B. had reached the eighth month of gestation when I was summoned by a messenger, who informed me that the pains were not very severe, but the flooding was alarming. When I arrived I found upon examination the os sufficiently dilated to allow me to ascertain how matters were. After using means to control the hemorrhage, I despatched a messenger for Dr. T. W. Vardon, of Hawkesville. The placenta in this case was attached laterally above the os internum and to the left side of the cervix. The presentation was natural.

We succeeded in pushing the placenta aside and delivered the child vertex first, removing the placenta afterwards. The patient being in a weak and anæmic condition made a very slow but good recovery.

Dr. Playfair in his admirable work on midwifery asks, Is it justifiable in cases of placenta prævia to use means to check the hemorrhage and allow pregnancy to continue? This is the course which has generally been recommended in works on midwifery. It is recommended to keep the patient cool and at rest on a hard mattress, and cold cloths applied to the vulva and lower part of the abdomen. Also to administer astringents to arrest the hemorrhage. The propriety of this plan of treatment has of late years been called in question. Dr. Greenhalgh (*Obst. Trans.*, vol. vi, p. 188) advises the immediate induction of premature labor in all cases of placenta prævia. Many other eminent authorities are of the same opinion. In fact, labor very often comes on of its own accord, but when it does not do so, the patient's life must be considered in great danger until the delivery is effected, inasmuch as fatal flooding may come on at any moment. Dr. Playfair therefore says "that it may safely be laid down as an axiom that no attempt should be made to prevent the termination of pregnancy, but that our treatment should contemplate its conclusion as soon as possible." He would however make an exception to this rule, when the hemorrhage occurs for the first time before the seventh month of utero-gestation.

--- **VENESECTION IN ACUTE RHEUMATISM.**

BY T. W. DUNCOMBE, M.D., WATERFORD, ONT.

Mr. A. L—, æt 23, was attacked with acute rheumatism on the 20th of April last. The symptoms present were pain, tenderness, heat, swelling and redness of the skin in the neighborhood of the joints. Even the movements of the bed clothes, or the slightest pressure over the joints excited great pain. The swelling was most noticeable in the knee, ankle and hip, affecting first the right leg, and a week later the left. He had more or less pyrexia, and sweating was a prominent symptom at night. The treatment adopted was as follows, viz.: salicylate of soda, bicarbonate of potash, colchicum and quinine; but this did not seem to relieve the symptoms much, although he afterwards had less pain and pyrexia. About the middle of April he was able to go around with crutches. From that time until the 1st of June, he did not improve any, when he came to me.

On examination of the heart I discovered well-marked pericarditis, more or less pain and swelling in the joints, especially in the knee and ankle, pulse 112. temp. 102°. I prescribed salicylate of soda, and bicarbonate of potash, with a mercurial pill at bed-time. Again saw him on the 3rd, but as he was no better I at once suggested that bleeding might help him. Took a pint of blood from his arm; immediately the pyrexia abated somewhat, and the pain was greatly relieved. I also gave him two mercurial pills. On the 5th he was able to walk without crutches, and on the 7th the pulse and temperature were normal, the pain entirely abated and from that time he recovered rapidly, and is now apparently as well as ever, and says he thinks he could outrun me on a hundred yards race.

Correspondence.

RÖTHELN OR GERMAN MEASLES.

To the Editor of the CANADA LANCET.

SIR,—In a recent issue I read with much pleasure, "Cases in Practice," by Dr. Alexander, but I am of opinion that his conception of Röheln which he terms German measles, is not quite correct. Measles are measles no matter if contracted by a German or a Turk.

So far as I have been instructed, Röheln is a hybrid, and I had a marked case of it about three years ago, under the following circumstances:—I attended a lady in her first confinement, and after having finished my duties, was desired to look at an adopted daughter of the family, whom I found suffering from scarlet fever. I at once enjoined isolation. A neighboring lady whose entire family was down with measles, desiring to be of service to the young mother, visited her with her infant child in her arms, upon whom the eruption was still out. In the course of a week I was again summoned and found the infant highly fevered, (I did not enter the temperatures in particular) with an eruption of a duplicate character; as regards diffusion it was general like scarlet fever, but of a coppery hue with here and there a few crescentic spots slightly elevated, but not the well marked characteristic eruption of measles. There was coryza together with strawberry tongue, and

slight inflammation of the fauces. The infant being but a week old the treatment was of necessity of the mildest character—sponging and keeping up the action of the skin with liquor ammoniæ acetatis, and recovery was complete with desquamation. This, according to my view, is the only case of Röheln I have seen where I could actually and clearly trace the source to double infection.

Fenwick, Tanner, and many German authorities confirm this view, and I am sure it would be highly interesting if Dr. Alexander could inform us if there was any chance of the double infection, remembering always that we may have scarlet fever *without* eruption, only having the tongue and throat symptoms with desquamation subsequently as a confirmatory point in the diagnosis.

Yours faithfully,

JAMES SKIRVING.

Tavistock, Ont., Nov. 1st, 1882.

NASO-ORAL RESPIRATORS.

To the Editor of THE CANADA LANCET.

SIR,—Will you kindly permit me a short space in reply to a communication which appeared in the last number of the CANADA LANCET, signed *Medicus*, who complains that he was charged four dollars by his Kingston druggist for one of the G. Hunter McKenzie Naso-oral Respirators. Whilst admitting that the instruments are well adapted for the purpose for which they were intended, he says they are so simple in construction that they might be sold for a much less sum, etc. You kindly explained in a foot note that the retail price of the instrument is \$3, or \$2.50 by the half dozen, but *Medicus* forgets, or does not know perhaps that we have to pay a duty of 25 % upon goods of this description coming into the country from Great Britain. This added to the original cost, together with the expense of advertising, sending circulars to each physician in the Dominion (introducing the instrument), forwarding the Respirators *free* by mail, etc., leaves but a small margin of profit to myself; and it is not for me to say how much the manufacturer makes, but he should be well paid for inventing so simple an instrument, which, with ordinary care, is not likely to get out of order even with years of use. The very sim-

plicity of their construction is what has caused them to be used so extensively by physicians. I sell them cheaper than any physician in the Dominion can bring them in for himself, and with them give one or two (as desired) prescriptions for their use. One of the physicians here got them for himself before I secured the agency, and they cost him \$3 75 each. I have sold several hundreds of them during the past six months to physicians of the various provinces of the Dominion, and have had only one or two complaints as to price, but on the contrary have had scores say that they are more than worth the cost; and have had most valuable testimonials as to their curative powers. They all think it is without doubt a decided advance in the treatment of phthisis, as well as bronchitis and nasal catarrh.

Yours, etc.,

J. S. MILLS,

Sole Agent for the Dominion.

Brantford, Nov. 13th, 1882.

CASE OF POISONING FROM STRAMONIUM.

To the Editor of the CANADA LANCET.

SIR,—On Oct. 31st was called to see a child æt. 2½ years, said to be suffering from convulsions. Found the child in maniacal delirium, pulse small, intermittent, and so fast I could not count it; the body was covered with a brilliant red rash, the pupils were widely dilated, and the little sufferer would scream out as though in fear of falling. From the appearances I thought it might be the effects of stramonium, and gave an emetic which it readily took from a nursing-bottle. I found in the vomited matter a number of the small ends of the *datura stramonium*. After the emetic had acted I gave a dose of castor oil which brought away about a large tablespoonful of the seeds. On looking around the place I found a plant of the stramonium species, when the sister remembered that the child had been playing with one of the capsules the day before. I think the case is remarkable from the number of seeds which passed through the child without causing death, as the number brought up by the emetic was very small, the greater portion having passed into the intestines and had time to produce their full effect. The child was all right the next day, except that the pupils were dilated.

Yours truly,

S. S. MURRAY.

Thorndale, Nov. 1st, 1882.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

August 30, 1882.

In the absence of the President and Vice-Presidents, Dr. Macdonald occupied the Chair.

Dr. Machell showed an encephalic monster with two rows of spinal tubercles extending as low as the last dorsal vertebra, due either to spina bifida or a double row of spinous processes.

Dr. McPhedran stated that microscopical examination of the ruptured uterus shown at last meeting demonstrated marked granular degeneration at the seat of rupture.

Dr. Workman read a paper on "Myoidema, or pachydermic cachexia," embracing a full resumé of the now well-known views of Gull, Ord, Mahomed, Goodhart, Charcot, and Haddow. The paper was a translation from the *Rivista Sperimentale*.

September 21, 1880.

The President, Dr. Geo. Wright, in the Chair.

Dr. McPhedran showed a boy, aged six, suffering from summer prurigo. The eruption first showed itself early in the summer of last year, continuing till the advent of the cold weather, when it disappeared, reappearing again this summer, as soon as the weather became warm. It is much worse this summer than last. The family history contains nothing of importance. The child is vigorous and lively. The eruptions consist of pinkish papules, varying in size from a pin's head to three or four times that size, the apex capped with a thin whitish scale; in many papules the scale is replaced by a scab. The only parts free from the eruption are the scalp, upper part of face, axillæ, anal fissure, scrotum, palms and soles; it is most abundant on the outer side of arms and legs, where the skin is thickened, harsh and dry, and scratch marks and scabs are very numerous. At night the itching is intense, and the pain produced by scratching disturbs the child's sleep very much. There is but little itching during the day. The axillary, cervical and inguinal glands are enlarged, and the belly prominent, being at times especially so. Treatment has done no good as yet. Sulphur and tar baths have been tried, but the facilities for prolonged bathing are imperfect. Ar-

senic, iron, and cod liver oil have been given internally.

Dr. Graham said the case was a most typical one of summer prurigo, as described by Hutchinson. He had had two cases in his practice, but they were complicated by wheals, and might be looked upon as lichen urticatus. He had recently seen a case of the inveterate prurigo (Hebra) much benefited by naphthone ointment.

Dr. Cameron said he had a similar case, to the one presented, of three years standing in an adult. He was inclined to believe that true prurigo occurred more frequently than acknowledged by the authorities. He saw a case a few years ago.

Dr. Oldright showed a case of leucoderma in a young man. It began two years ago, and occurred in small spots, chiefly on the right side of neck and chin. There was no evidence of any constitutional taint.

Dr. Cameron reported a similar, but more marked case under his care at the Toronto General Hospital at present, the hyper-pigmentation around the spots being very distinct. He advised the local application of liq. epispasticus, and the internal administration of cod liver oil, phosphides, especially the phosphide of silver, etc.

Dr. Graham saw a case treated successfully, temporarily, at least, by mustard plaster.

Dr. McPhedran next showed a young woman with a tubercular and bullous eruption, possibly due to the bites of the *Cimex Lectularius*.

Dr. George Wright read a paper on Rötheln, in which he gave a very full account of the disease, with its treatment. He traced its history from the time it was first described as a form of measles or scarlatina, or a hybrid of both, one hundred or more years ago down to the present time, when Rötheln has been accorded a place among the essential fevers.

Dr. Cameron thought the disease should be called Rubella, as suggested by the American Dermatological Association, and spoke particularly of the character and behaviour of the rash, the pulmonary and other symptoms. He said there had been an outbreak of Rubella in the House of Providence during the past summer, followed by, and continuous with it, another of measles. There were no deaths in the former, but a large number had terminated fatally in the latter.

Dr. Graham said an outbreak of Rubella had

occurred in Brampton in 1872, and was described in an article in the CANADA LANCET, by Dr. Heggie. This was a year before the first outbreak occurred in New York, according to Dr. J. Lewis Smith, as stated in the paper read this evening.

Dr. A. H. Wright said a wide-spread epidemic occurred in Colborne, Ont., during the second year he was in practice. He thought there was great difficulty in diagnosis owing to the varying character of the symptoms.

Dr. Oldright said outbreaks of what was called hybrid measles and scarlet fever, by the leading physicians, occurred in Toronto during 1863-65.

Dr. Temple referred to an outbreak which had occurred in one of the ladies' schools during the recent epidemic, and asked the opinion of the Society on the propriety of closing the school.

Dr. McFarlane said he had had some very severe cases during the recent outbreak, one child having died. In this case the rash came out quickly all over the body; was abundant, bright-colored at first, but became darker in a short time, and the child died from exhaustion in a few hours. Dropsy had followed in a few cases he had seen. He believed it was most likely confounded with scarlet fever.

In answer to Dr. Temple, Dr. Cameron said he thought the school should not be closed but quarantined, as the poison being disseminated in the early stages of the fever would be carried home by the ladies.

Dr. Nevitt agreed with Dr. A. H. Wright as to the great difficulty in making the diagnosis in many cases.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the CANADA LANCET.)

The regular quarterly meeting of this Board was held Oct. 1st, 1882. The President read his annual address, reviewing the work of the Board, and suggesting work for the future in the line of securing the introduction of text-books on hygiene in the schools; greater attention by localities to the pay of health-officers, and some amendments to the public health laws, etc.

The Secretary presented a communication relative to wounds from toy-pistols, describing the pistols and the nature of the cartridges as determined by analysis, also a report of several cases of lockjaw and death following toy-pistol wounds.

Dr. Lyster reported in preparation a paper on the present knowledge of typhoid fever, and he was requested to prepare his paper in the form of a document for publication in the Report, and for distribution. In this connection Dr. Baker presented two diagrams, showing for the year 1877-1880, the relations of deaths from that disease to population, from which it appears that the common opinion among physicians, that this disease prevails mostly between the ages of 18 and 35, and that there is little danger after 40, is not sustained by facts. A greater proportion have typhoid fever at the ages between 60 and 80 than at any other age in life.

The subject of compulsory registration of plumbers was referred to Mr. Parker, and Dr. Lyster, for the purpose of bringing it before the Legislature.

The committee on sanitary conventions was authorized to make arrangements for a convention at Muskegon about the last of November, or first week in December.

The Secretary was authorized to purchase a Thomson's Quadrant Electrometer, and by means of it to enter upon the observation of atmospheric electricity.

Mr. Parker presented a proposed bill, making it a criminal offence to communicate a contagious disease, and it was ordered to be published in the Annual Report, for the purpose of bringing it before the Legislature.

In Detroit, it was stated, that it was proposed to erect a "flame-ventilated" small-pox hospital as proposed by Dr. Wight, the Health-officer. Members questioned the practicability of the plan, and it was referred to a committee.

A committee consisting of Mr. Parker and Rev. Mr. Jakes, was appointed on a plan for the regulation of medical practice. The next regular meeting will be on January 9th, 1883.

Selected Articles.

CLINIC BY DR. S. W. GROSS, PHILADELPHIA.

RETENTION OF URINE, ITS CAUSES AND TREATMENT.

GENTLEMEN.—This young man comes before us saying that he is suffering with retention of

urine. The first thing to be done when you are called to a case of this nature, or see one in your office, is to ascertain the cause of the retention. If it occurs in an infant you may assume that it is due to an elongated and contracted prepuce; if in an old man, that it is caused by an enlarged prostate gland; if in a young man, like the patient before us, you will usually ascribe it to a recent attack of gonorrhœa, or to a stricture of the urethra, and you can prepare your instruments accordingly. Of course there are exceptions to these rules, but these are generally true.

This man says he has suffered from inability to pass water for the past six weeks, off and on; that is to say, the retention has not been constant, but comes on frequently. He has had several attacks of gonorrhœa. He thinks his difficulty is caused by a stricture, although he has not had his urethra examined; but physicians who were called in to draw off the urine have told him so. He states, however, that they had no difficulty in passing the catheter into his bladder. According to his statement, he is not a drinking man. The present attack came on him after exposure to cold, and he says it was aggravated by excessive sexual intercourse; he always finds after such connection that he has retention of urine. There is some dribbling of urine, and pain is caused by pressure over the pubes, but the bladder is not very greatly distended, the dullness on percussion not extending much above the pubes.

By retention of urine we simply mean inability to evacuate the bladder. With it is usually found pain and tenderness, and, in addition to these symptoms, there is more or less pyuriform tumor above the pubes, extending towards the umbilicus.

He passed a little water two hours ago; he has a constant desire to empty his bladder, and there is a little dribbling, which may be termed the incontinence of retention. When called to attend a patient—especially a woman—said to be suffering with incontinence of urine, do not treat the incontinence before examining the bladder; you may find that it is simply too full, and is overflowing.

It is important to remember that in all these cases of retention from stricture of the urethra, the real cause of the retention is not the stricture itself. The narrowing of the urethra by a stricture is never so tight as to completely obstruct the flow; and, in the majority of cases, the cause of the trouble is swelling of the inflamed mucous membrane just behind the contraction, combined with spasm of the muscular fibres of the urethra, induced by exposure to cold or indulgence in alcoholic drinks. Therefore, in these cases, if you give your patient a hot bath, and a full dose of opium, you may relieve him; it is not always necessary to pass a catheter, for anything that will relieve the spasm will remove the retention. I will try to pass this small, olive-tipped, flexible

bougie. It goes in readily. Now, as I withdraw the instrument, I instruct him to try to pass his water, and you see it flows freely, the spasm being relieved. It is not always necessary to pass a hollow instrument, as you observe. There is nothing more to be done at present, but the young man is recommended not to neglect the stricture, but to return here, in the course of a few days for its treatment. He says that when he gets up in the morning he finds the meatus glued together by a slight discharge. I will order for him two copaiba capsules after each meal; each contains five grains of copaiba and five of cubebs with magnesia and carminatives so as to prevent disagreement with the stomach. He shall also use as an injection, several times daily—

R—Liq. plumbi subacetatis, f ʒ j
Aque, f ʒ x.—M.

CARIES OF THE WRIST, FOLLOWING SYNOVITIS.

This man is 65 years of age; a weaver by occupation. He says that while lifting a heavy stone, about nine months ago, he sprained his wrist, and he has not been able to use it since, but it has remained stiff, painful and swollen. The pain has lately increased, requiring large doses of opium to give him rest at night. There is no history of syphilitic disease, or of any strumous trouble. There is no constitutional vice, therefore, to account for the outbreak; but, as he has just stated, it is the result of an injury received nine months ago.

He says that he thinks he twisted his wrist; it became swollen at once, but there was no marked discoloration at the time, as far as he can recall. The pain is getting worse, and sometimes the arm jerks and wakes him up from sleep. You will see, upon comparing the right arm with the left, that there is a marked distortion of the right wrist; it looks as if there might have been a subluxation of the joint, though, of course, there is nothing of this description. When I take hold of the forearm and hand, and press the bones together, it increases the pain; but when I make extension and counter extension the pain is at once relieved. At one point on the outside of the joint there is an opening; he says that about four weeks ago it was so swollen and red that a physician lanced it, and it discharged freely. This incision is still open, and upon inserting a probe I find it comes immediately in contact with dead bones; I feel the roughened surface of the trapezium, and of the first metacarpal bone, with which the former articulates. There is a good deal of thickening of the joint, and, as you see, some suffering upon the introduction of the probe.

We have, then, a case before us of caries of the wrist-joint; or, at all events, of the trapezium, and probably of some other bones of the contiguous row. This commenced, probably as a synovitis. I believe that the bone was not injured originally,

but becoming involved in the surrounding inflammation, the cartilage has been destroyed, and the bone itself carious. When I pressed the bones together you saw the man wince. On the contrary, when I made extension, so as to keep their inflamed surfaces separate, he told you that the pain was relieved. Please remember this. As regards treatment, whether it will come to the question of resection of the joint or not, I am unable to say at the present moment; but as suppuration was only apparent a month ago, it shows that the pus is of recent formation, and that active caries is still going on. In this state of affairs operative measures for relief of the caries would be ill-advised. We must apply remedies for the relief of the local inflammation, such as a strong solution of muriate of ammonia, or lead water. The application of a splint and extension are also necessary. You are aware that in all active joint-disease, whether of the knee, the hip, or vertebræ, the first objects of treatment are to keep the joint at rest and to apply extension and counter-extension.

I feared that there was destruction of the cartilage here, and that the joint was inflamed, before introducing the probe, because he spoke of the painful, spasmodic jerking of the limb at night; the inflammation of the joint transmits the sensation of pain to the spinal cord, where it is transformed into a motor impulse, causing a spasmodic contraction of the muscles around the joint, bringing the inflamed surfaces violently in contact, and producing so much pain as to wake the patient from his sleep.

The same general treatment is required as in Pott's disease of the spine, or inflammation of the knee or hip; the principle is identical; you need only have a modification of the apparatus.

In order to accomplish the desired end, I will have the fore-arm shaved, and I will apply two pieces of adhesive plaster, three inches wide, front and back, which shall extend from above the wrist to several inches beyond the fingers. I will then apply a straight splint, containing a mortise opening, and bearing at its extremity an iron hook, to which the ends of the strip are to be fastened, after sufficient extension has been made; the fore-arm being placed upon the splint, which is held in place by adhesive strips, elastic extension will be kept up constantly, with great relief to the patient. He will rest better, his appetite will return, and his general health improve, soon after the apparatus is applied. It does not interfere with any local treatment, or the use of the lotions already referred to. No internal medications will be needed. In joint disease the patient runs down, not so much from the cachexia or long continued suppuration, as from the constant suffering and loss of sleep, and as soon as you relieve the pain the patient picks up. In joint disease, rest, with relief from pain, is the sheet-anchor of the treatment.

SARCOMA OF THE ILIUM.

When this man lies upon his face you will notice a very great difference in the appearance of the buttocks. The left buttock projects as a hemispherical tumor, there is obliteration of the gluteo-femoral crease, and the internatal line inclines to the affected side. I find that the local temperature is elevated two or three degrees, although the precise increase can only be determined with a surface thermometer. The tumor is elastic, and apparently fluctuating; but the integument is not discolored, nor are the subcutaneous veins enlarged and prominent.

Such a swelling, with elevation of temperature and fluctuation might be an acute abscess, and if there was no evident increase of heat, it might be a strumous abscess or what has been called a cold abscess, which often occurs in this location. Why may this not be a cyst? A cyst possesses fluctuation and swelling, but no heat; at least I never saw such a cyst. Therefore the very presence of heat suffices to eliminate a cyst from the diagnosis. The elements of the age of the patient and the duration of the tumor must not be left out of our consideration. The man is 47 years of age; he only noticed the tumefaction twelve months ago; he says it began with a pain in the hip and back, and he thought he had rheumatism; he subsequently found that the part was swollen. There was no injury, as far as he knows.

We have here a swelling which commenced without an assignable cause, and with pain of a rheumatoid character; it was a dull, heavy pain. Is it a tumor? I trace the outline of the limb; I find the upper border of the great trochanter, and I can also trace its posterior surface; hence I infer that we are not dealing with a growth from this process of bone. I can also trace the outline of the tuberosity of the ischium, so that it cannot be a tumor growing from this bone; but I cannot follow the innominate bone, and conclude that it possibly involves the ilium. We could ascertain the nature of its contents with an exploring needle, but we know that it is not an acute abscess, from the time required for its development; it is a tumor, and from its comparatively rapid growth, I am safe in assuming that it is a sarcoma, without the use of the exploring needle. He tells us, however, that a needle was introduced by a physician a few days ago, and that nothing came out but a little blood. This is a sarcoma, a most malignant tumor of the connective tissue series. Its exceedingly rapid growth, attaining this large size in only twelve months declares its nature. We might have a chondroma, or a bony tumor in this situation, but they would be of much slower growth and of firmer consistence. The pains that he refers to, shooting down his legs, are probably caused by the pressure of the growth upon the sciatic nerve,

with the distribution of which the description agrees.

From the symptoms, I regard this as an example of small-celled sarcoma. Nothing can be done in the way of surgical measures; but we may possibly retard the rate of growth, and prolong his life, by applications of sugar of lead.

ADENOMA OF THYROID GLAND OR GOITRE.

This woman presents herself with a tumor in the median line of the neck, which she first noticed when she was sixteen years of age; as she is now thirty-seven, it has existed nearly twenty-two years. For the last few months, however, she has had increasing difficulty in swallowing, and she says that last week it became almost impossible to get anything down except fluids. She has no difficulty with her voice whatever, only with deglutition. There is a slight cough. You observe that when the woman swallows, the tumor rises and falls; this shows that it is attached to the thyroid gland, the thyroid gland itself, as you know, being attached to the trachea, so that it moves when the larynx rises in deglutition. This tumor extends, on the one hand, as far down as the notch of the sternum, between the clavicles; and, on the other, as high as the pomum Adami, or the most prominent portion of the thyroid cartilage; on each side it extends under the border of the sterno-cleido-mastoid muscle. The growth is rather movable, prominent, dense, but not uniformly so; in some places it appears to be soft, as if undergoing degeneration.

We have here an adenoma of the thyroid gland, called by the Germans "struma," by others a goitre. Indeed, all goitres, in their beginning, are adenomata. Goitre is not very common in this country; it is more so in the mountainous regions of Europe. As we see it, goitre is not a very important affection; it occasionally produces difficulty in swallowing, as in this patient. There is no pain, and no evidence of pressure on the pneumogastric nerve.

There are several things which might be done for this disease. Sorbefacient remedies are often serviceable. A very common prescription with me is the following:—

R.	Unguent. hydrarg. biniodid.,	3j	
	Camphoræ,	3j	
	Cosmoline,	3j.	M.

I direct the patient, each morning, to take a piece the size of a marrow fat pea, and to stand so that the direct rays of the sun may fall upon the goitre while the ointment is rubbed in. The application may be repeated at night. I will also give her five drops of Lugol's solution, to be taken largely diluted, after each meal. You might order in place of this, muriate of ammonia; in twenty-grain doses, three or four times in the twenty-four hours, and by gradually increasing the dose, we might confidently look for some decrease in the

size of the growth. Under these remedies, we frequently find that the tumor almost entirely disappears.

We might treat this case by parenchymatous injections; iodine in various forms, or ergotine, or Fowler's solution may be thrown into the tumor; but I do not think any great benefit would result. These interstitial injections have no special advantage to compensate for the danger of the occurrence of inflammation, necrosis, and abscess, which may endanger the life of your patient. There is also the operation of thyrectomy, which has been practiced for the last twenty-five years, but more particularly within the last ten years, with very fair results. Taking into consideration the difficulty of the operation, the neighborhood of important vessels and nerves, and the danger of diffused inflammation of the soft tissues of the neck, it is remarkable that the operation is so successful, the mortality being about twelve per cent.

This woman will use the ointment and Lugol's solution, as directed, and if the difficulty in deglutition increases so that the obstruction is permanent, she will return to have the gland extirpated. As good surgeons, you will always try the simple measures first, before resorting to harsh ones. Let her report in three weeks.

SYPHILOMA OF THE STERNUM: CONGENITAL SYPHILIS.

This little child, eight years of age, is brought here by her mother, on account of the swelling over the upper bone of the sternum; she also has a skin eruption upon her lower extremities and other portions of her body. I will merely show it to you, as the mother refuses to allow me to give an anæsthetic, and the child is too noisy to permit any extended examination. It forms a fluctuating swelling of considerable size, and the skin over it is discolored. It is very evident that this is simply a broken down gumma over the sternum. The case is one of congenital syphilis, and is under appropriate treatment.

SEBACEOUS CYST OF THE SCALP.

This man, who has a prominent swelling upon his scalp, tells me that his mother had a similar development. I asked him the question incidentally, because I had in mind the case of a man suffering with mammary cancer upon whom I operated at this clinic, whose scalp was covered with these excrescences, and his daughter who came with him also had a number of them. Let me say in this connection that many of the surgeons mention as one of the points of difference between a malignant and a benign growth that only the former is inherited. They seem to overlook that this also occurs with innocent tumors, even with the simplest of all, the sebaceous cyst.

This, as you see, forms a roundish tumor beneath the scalp, feeling soft to the finger; it is covered with skin partially deprived of hair. It is

caused by occlusion of the orifice of a sebaceous follicle, and the retention of its contents. A sebaceous gland may have its duct terminating in a hair follicle, or it may open independently upon the surface of the skin. In either case the orifice may be closed by the introduction of a foreign body, or by inflammation; the cyst thus becomes distended, and its wall thickened, the epithelial cells keep on undergoing fatty degeneration and accumulating, and the tumor continues growing until it gets to be the size of a small apple, very rarely larger. They are most common on the scalp, face, and lobule of the ear; but may occur in other parts of the body, wherever sebaceous glands exist. They usually contain, a soft, pultaceous, putty-like mass, but in some the contents are fluid, and fluctuate upon pressure, and the sac is found to contain an oily fluid, the epithelial cells having undergone advanced fatty changes. Sometimes cretification occurs, and the cyst wall becomes calcified. These growths are gregarious, and are sometimes very numerous. They only give rise to annoyance by their presence; they are not painful. Sometimes, as when they are of long standing, they occasion, by constant pressure, absorption of the outer table of the skull immediately beneath them.

The proper treatment is complete enucleation, without leaving behind a particle of the cyst-wall, for the smallest fragment may lead to a new growth. In the most favorable cases, where the cyst is comparatively solid, we may make an incision, merely through the skin over the tumor, and enucleate it, like a filbert from its hull; even when it is more or less adherent it may often thus be removed without opening the sac. Some surgeons prefer at once transfixing the tumor with the bistoury, laying it open and discharging its contents, and tearing the cyst-wall out with the forceps. I prefer the former method when it is practicable. By a straight incision over the tumor, you see that its shining wall protrudes through the opening, and the entire cyst now slips out of its bed. I have not removed any of the skin, although it appears redundant, because it will soon shrink again in healing. One of the first principles of surgery is to clean the wound in order to obtain primary union. If I should close this immediately the blood would accumulate in the interior and cause suppuration. I will, therefore, let the patient wait until bleeding has ceased, and then bring the edges together with two points of the interrupted suture. The bleeding can be stopped by hot water applications, if it continues too long.

As regards sutures in the scalp, you will find it stated in the books that they may cause inflammation or erysipelas. Nothing can be further from the truth. You may apply them, whether of silk, silver, or other material, with as much freedom as in other parts of the body. The inflammation is

the result of the operation or of the wound, and is not caused by the sutures, any more than by tying together locks of the hair; so you need never be afraid to introduce any kind of sutures into the scalp.

These sebaceous cysts may break down, and discharge by suppuration. Granulations will then spring up from the bottom, and will give rise to a very ugly appearance, causing them to resemble a malignant tumor. You will remember this possibility in making a diagnosis.

TUBERCULOSIS OF THE CERVICAL AND OTHER GLANDS.

Here is one of those cases that I had before you at the last clinic, of trouble in the lymphatic glands of the neck. The neck is very much swollen, and there are openings in several places in each side. Some bloody discharge is escaping from one, which extends deep under the fasciæ behind the jaw. When I press this swelling, a little pus exudes from the sinuses. He says that this scar on the left side was caused by an operation performed at this clinic. About a year ago my colleague, Dr. Levis, cut down over the sternocleido-mastoid muscle and removed a mass of glands; but you see here another large mass under the ear as large as an orange. These on the right side have simply been lanced.

We have an example here of tubercle of the lymphatic glands. One of these glands first became diseased, and the infection has spread to the others, and they have undergone cheesy degeneration, a very common thing in tubercular processes, whether of the lungs or elsewhere. He tells me that the glands are also enlarged in the arm pits, and I find a large mass under the left pectoral muscle. This shows that the disease is general; it is similar to what we sometimes find in sarcoma; it is really a malignant infection of the glands. If at the beginning I could have got at the first gland and removed it, I would have succeeded in preventing the infection of the other glands; for that attack at least, for tubercle is apt to return.

Very much has appeared in the medical journals, of late, with regard to the bacilli of tubercle. They are small organisms which may be found with the microscope, with the power of about five hundred diameters, in sections taken from the lung and tuberculous glands. This micro-organism is said to be the cause of tuberculosis originally, and the means by which it extends to other parts of the body. Klebs, in 1868, first called attention to it, but his observations were lost sight of, until they were recently revived by Koch and others. Like the bacteria which are found in suppurating wounds, and in septicæmia, I believe that the bacilli of tubercle do not initiate the trouble; they merely act as carriers of the infection, just as the white blood cell carries it. This is the whole matter. Here we have an infectious disease of the

glands. Either through the opening made in the original operation, or through the subsequent openings, the bacilli entered the wounds from the external air, subsequently multiplied in, and migrated into other glands, carrying infection with them.

We will not attempt any specific treatment, whatever, in this case, but simply tell the man to live on good diet, to take milk punch, to exercise in fresh air, and attend to his general surroundings; we may also give him a tonic. In this way we endeavor to build him up, and render him capable of resisting the spread of the disease.—*Col. and Clin. Record.*

MALTINE IN NERVOUS DISEASES, ETC.

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My very successful experience with maltine makes me feel it a duty to the profession to point out some of the principal features of merit this very valuable preparation possesses. Prof. Ogden Doremus, of New York, claims that maltine "*is nutritive to every tissue of the body, from bone to brain.*" The opinion of this very distinguished chemical observer seems well based in fact, when we consider the composition of maltine, containing, as it does, in a most concentrated form, the most valuable and nutritive constituents of malted wheat, oats and barley. It therefore contains *three* most nutritive and digestive agents, rich as they are in phosphates, diastase and albuminoids. Hence at a glance, it is apparent that for constructive metamorphosis of the brain and nervous system at large, this preparation must prove most efficacious. The large proportion of brain and bone producing food it contains, therefore, makes it of incalculable benefit in many forms of wasting and asthenic disease. The large proportion of diastase and other albuminoids present in its composition, give it both digestive and nutritive value. Its digestive properties, in fact, enhance its nutritive or tissue forming capacity.

The nutritive constituents in these cereals vary respectively. The well ascertained fact that oats and wheat are preponderate in *nitrogenized* principles, is a substantial advantage possessed by a preparation of this character, and naturally very greatly elevates it in value over oleaginous articles rich in the hydrocarbons exclusively. Therapeutically, maltine thus has a much larger range as an analeptic measure, and supplies a want long experienced by the profession in the treatment of wasting and neurasthenic maladies. The large amount of the phosphates, albuminoid and other valuable nutritive elements in a preparation not unpalatable,

and which keeps perfectly in all climates, is an advance in nutritive preparations not too highly to be appreciated by the medical profession. Then, again, as Prof. Attfield observes, another advantage of no mean value is, that it "belongs to the *non-alcoholic* class, and is far richer, not only in the directly nutritious materials, but in the farina digesting diastase. In comparison with the alcoholic malt extracts, maltine is about ten times as valuable as a flesh former; from five to ten times as valuable as a heat producer; and at least five times as valuable as a starch digesting agent." With such chemical recommendations we can, therefore, no longer doubt the genuine merits of maltine. It occurs here to us to add that its *non-alcoholic* properties give it a signal advantage in chronic conditions of debility, as the prescribing of alcoholic preparations under such circumstances is a practice fraught with future dangers to the patient, for which the medical practitioner is, in a moral point of view, directly amenable to charges of criminal carelessness, as our experience fully attests. In a word, in all diseases of general debility, wasting or atrophic affections, and in nearly all varieties of indigestion, it is a therapeutic auxiliary, the most valuable we have as yet encountered, and with which we conscientiously say we do not tire, being daily more and more convinced of its advantages. With the long and very extensive practical experience we have had of its value, we would be at an infinite loss to replace it in our daily practice now that our confidence in its real merits has been so fully established. Such being a few observations upon maltine considered theoretically in connection with its composition or most beneficial constituents, we will now more particularly specialize some of its advantages from a practical and clinical standpoint, illustrative of the efficacious results attained by employing an agent so rich in diastase, and very important nutritive elements. At a glance it will be observed that the field for this preparation is in cachectic and diathetic conditions, all perversions of nutrition, difficult assimilation, disordered digestion, in which individual or all the gastric and intestinal functions are in abeyance, gastric and intestinal lesions, pulmonary affections, diseases of debility, general prostration, wasting maladies and all depressed or neurasthenic conditions of the nervous system. In a word, in the treatment of nervous diseases, maltine is one of the most valuable therapeutic agents at our command. Such being the immense scope for its usefulness, we will now more particularly endeavor to individualize some of the more special morbid conditions in which it has attained its greatest usefulness in our hands.

In the treatment of epilepsy it has always been desirable to possess some agent to give in combination with the bromides, in order to obviate the very depressing effects and tendency to the pro-

duction of dyscrasia, that the latter remedy sooner or later superinduces, when its administration is long continued, as it must needs be, in the treatment of that implacable affection. I have found maltine most useful in this connection, especially when it is given with iron and quinine or the phosphates, or some other of the various tonics with which the preparations of maltine are intimately united. It has the effect of greatly obviating the unpleasantly depressing effects of the bromide salts. In all the forms of dyspepsia, especially in the dyspeptic complication of neurasthenic diseases which are so common, constituting a vicious circle, one morbid condition reacting upon and aggravating the other, maltine is invaluable, especially when administered in combination with pepsin and pancreatine—which latter preparation contains six grains of pepsin and pancreatine to the tablespoonful.

In chorea, hysteria, and many allied neurotic conditions, where cerebro-spinal anæmia is one of the principal underlying pathological conditions, I know of no remedy which, as an *auxiliary* method of relief, I consider more urgently indicated when combined with the classical remedies which are resorted to in these diseases. As a nutritive tonic I use it exclusively in the place of cod liver oil, and alone or in emulsion with the latter, I deem it a most important and useful therapeutic agent in pulmonary affections, and, as I have said before, in neuralgia, epileptiform complications, many varieties of paralysis, chronic and numerous other neurotic affections, I have found it a most important adjunct when combined with the standard remedies usually administered in such cases. In many perversions of nutrition, such as the atonic and nervous varieties of dyspepsia, maltine has a most happy effect, correcting functional gastric disturbance, improving digestion, promoting assimilation, and *rapidly increasing bodily weight*.

In neuralgia, when "the hungry nerve cries out for food," there is no analeptic preparation that equals it, especially when administered with phosphates or hypophosphites. Cod liver oil is hardly comparable, because there are so few stomachs that will tolerate the latter remedy for a great length of time, and at all seasons. The combination of maltine with *peptones* is highly desirable in this affection, and is a very useful preparation, which being highly nitrogenized and rich in albuminoids, cannot fail to be of service when administered in conjunction with quinine, iron, the arsenical preparations, and other remedies which constitute the armamentarium of the physician in neuralgic diseases. In grave and hopeless cases of organic nervous lesions, maltine is useful by aiding nutrition and promoting the functions of digestion and assimilation which are so frequently perverted. In such cases it certainly serves to prolong life. Such are some of the more important

uses of this remedy which I have cursorily reviewed. Some I have, doubtless, overlooked, and many not analyzed in a sufficiently exhaustive manner.

One merit possessed by maltine is, to my mind, one of the greatest claims corroborative of its superiority and advantages over nearly all other analeptics, namely: that when administered *alone*, as I have not seldom witnessed, it will exercise in not a few instances the most happy and beneficial effects. There are very few cases of *chronic* nervous diseases, or conditions of depression in other affections, not in any way allied to the neurotic group, in which I do not prescribe maltine, and expect to reach results no longer a source of astonishment to me, but which are daily witnessed in my practice from its administration.—*St. Louis Med. and Surg. Journal*.

CYSTITIS—TREATMENT BY WASHING OUT THE BLADDER.

A. Male double current silver catheter with flanges for attaching rubber tubing. *B.* Female double current silver catheter without attachments. *C.* Household syringe attached to catheter with rubber tubing. *D.* Rubber tubing attached to the catheter for the purpose of conveying the fluid to a vessel at the bed-side of the patient, preventing soiling of the bed.



The treatment of diseases of the bladder has heretofore been very difficult on account of the crude means of applying remedies to the diseased organ. By the aid of a suitable instrument diseases of the mucous membrane of the bladder are as amenable to treatment as if located externally. The bladder must be kept free from decomposed urine, in order to effect a cure.

A continuous current of pure medicated water can be carried through the bladder, and the organ kept free from mucus, gravel, blood-clots, etc. There are bacteria in all decomposed urine which keep up constant irritation of the mucous membrane. Carbolyzed warm water passed through the bladder destroys them. The instruments heretofore used for washing out the bladder have been very poorly constructed, and I have been very much annoyed with their use, hence the invention of this instrument.

Prof. S. D. Gross, in the *Med. Gazette* for May,

1882, says, "The local treatment of cystitis is the most important. As regards the treatment of the urine, it must be borne in mind that the ammonium in the urine keeps the bladder in a constant state of irritation. The first thing to be done, therefore, is to wash out the bladder. The best way, perhaps, of doing this is to procure a gum-elastic bag holding about four ounces, and to have a basin of water at 98° F., ready. Then after drawing the urine with a flexible catheter, whose end is smooth, allow the catheter to remain *in situ*, and the bladder may be washed out by simply connecting the mouth of the bag with the catheter. The warm water thus injected should be retained as long as possible, and then drawn off, and the operation repeated." With the use of the above instrument the patient can lie in bed and have any quantity of pure or medicated water passed through the bladder without removing the catheter, or distending the same in the least, but if desired to distend the bladder, compress the delivery tube with the thumb and finger, and continue to force water into the bladder until a sufficient quantity has been thrown in, then remove the pressure and let it pass out.

Some of our eminent surgeons have advised the operation of lithotomy for the cure of cystitis. The incision is kept open in order that the urine may pass off as soon as it is secreted by the kidneys, so that it will not remain in the bladder and keep up irritation of the organ. Such eminent men as Emmet, Parvin and others, have operated upon females and kept the incision open for twelve months in order to give the bladder rest, and nature a chance to repair the damaged organ. My mode of treating irritation of the mucous membrane of the bladder, from whatever cause produced, is to keep the bladder washed out thoroughly—if necessary keep a stream of water constantly running through the bladder, and not allow the urine to remain in the organ long enough to become decomposed. I will give a few cases, treated in this way, for illustration.

Mrs. M—, 39 years of age, the mother of nine children, the youngest five years old. She stated to me that she had been suffering intensely with her bladder for nearly four years. She has passed a great number of small calculi from the size of a pea to mere sand. Her suffering has been increasing, and calls to micturate have become more frequent, and painful, at the present time nearly every fifteen minutes. On examination of her urine I found it very scanty, high colored, and containing clots of blood, and a quantity of mucus. It also contained phosphates and bacteria in abundance. I washed out the bladder with warm water acidulated with nitric acid every day, and the sand came away in large quantities at each washing. The sand finally ceased passing and the patient improved in flesh and strength rapidly,

but still the urine remained ammoniacal, and contained bacteria. The use of carbolized warm water soon removed them, and the patient was entirely cured. Twelve months have elapsed since and the patient is in good health.

Mr. B.—, 40 years of age, stout and healthy, has had gonorrhœa and was under a surgeon's care for nine months for stricture of the urethra. The mode of treatment was dilatation, but he did not improve under that treatment and requested me to examine his case. I examined his urine under the microscope and found bacteria in abundance, and his urine ammoniacal. I washed out his bladder twice with carbolized water, which entirely relieved him.

Mr. H—, twenty-three years of age, single, had gonorrhœa two years ago. Says he has gleet and "the doctors can't cure him." He has been under treatment from physicians of his place for over a year, and is no better. I examined his urine and found it ammoniacal, and it contained mucus, blood, pus and bacteria. I washed out his bladder with carbolized warm water, and a quantity of mucus, blood and pus came away. I continued the stream of water until it came away as clear as when it entered the bladder. Three weeks treatment with washing out the bladder and a slight diuretic relieved him.

My friend, Dr. J. W. Pritchett, corresponding Secretary of the Kentucky State Medical Society, and ex-President of the McDowell Medical Society, has treated a number of cases of irritable bladder successfully with this instrument, that had resisted all other means employed.—Dr. Ross, in *Am. Med. Weekly*.

THOMAS KEITH ON OVIARTOMY.—It is never too late to notice the words of Thomas Keith on this subject. Especially are they of interest now. Since of late, discussion has been rife in certain journals as to whether he has abandoned the use of antiseptics in ovariectomies or not. This pamphlet contains his latest utterances, and they may be summarized as follows. During fourteen years prior to the use of antiseptics, the mortality in two hundred and thirty ovariectomies was nearly one in seven. In the year before the spray was used, in twenty-one cases, but one died. Of the entire number, only two had a temperature of 103°. Of the first eight cases after using the spray, there were two deaths; then eighty successful cases. The spray solutions were weak. Then a five per cent. solution was used. Immediately it was noted that the temperature often rose above 103°, even to 107°. Finally he came to the conclusion that this rise was due to absorption of carbolic acid. Whilst using the spray, he had not drained as often as before. Lost a case from acute septicæmia. The

next case, though very similar, recovered, the spray and drainage having been both used. Finally, four cases had hæmorrhage from the kidney; two of them died from pure carbolic poisoning. He was himself repeatedly ill from effects of poisoning, even to hæmorrhage from kidneys. So, after two years' faithful trial, he gave up the spray. He doubts if it is of any use whatever in ovariectomy. Since, he has had twenty-six cases without a death, without a temperature much above 100°. His present practice is to use sponges, usually disinfected by a one in twenty solution of carbolic acid, often only put in hot water. The ligatures are of silk for the pedicle, and deep sutures of horse-hair for the superficial. The wound is carefully closed; is not looked at for a week, and then is generally healed. It is covered with carbolized gauze softened with glycerin, a layer of cotton-wool, a flannel bandage. Where there were extensive adhesions, and where the abdomen cannot well be cleansed, he drains. If there is not free drainage, he introduces a syringe through tube, and sucks out. Drainage tube, in general, removed in forty-eight hours. Since substitution of ether for chloroform, he has had scarcely any prolonged vomiting. The patient is in bed for a fortnight, sitting up in a week or ten days. The incision should be as small as possible, always, however, long enough to admit the hand. As to the time for operating, if a patient has a tumor, "if it is to come out, better have it out without loss of time." He taps a great deal; likes it. Only danger is from hæmorrhage, and this is lessened by using a small needle. Exclusive of cysts of broad ligament, he has tapped perhaps a dozen small cysts, and cured by tapping. Adhesions come from imperfect tapping. He makes no injections into cysts. Generally cauterizes the pedicle, though of late has been using silk ligatures a little. For the purpose of looking into the abdomen to see if all is clean, he uses a reflector, and finds it invaluable.

The question of removing fibroids is in same condition ovariectomy was twenty years ago. The rapidly growing ones in young women should be removed. Fibrous cysts should be taken out as soon as possible. Fibroids growing by pedicle from fundus he never touches, because they don't kill. Internally ergot is of service. Has operated nine times, with eight recoveries. The one fatal case was due to carbolic poisoning.

As for extirpation of the uterus for malignant disease, he has had no experience. You rarely see them in time, and if you do operate, the disease would return.—*American Practitioner*.

MOVABLE LIVER.—Science has recorded ten cases of movable liver, all pertaining to the feminine sex, and so clearly described that, notwithstanding the absence of anatomical verification,

there can be no doubt as to their authenticity. The displaced organ floats in the inferior region of the abdomen, easily recognizable by its form and volume, and can without difficulty be replaced in the right hypochondrium. The laxity of the suspensory ligaments which permits of this condition is always consecutive to repeated pregnancies, but in the case we are about to relate there is a new element, viz., incurvation of the vertebral column due to Pott's disease.

The subject, a woman æt. 50 years, relates that in her youth she was healthy, menstruated at 16, and became suddenly hump-backed at the age of 28 years without any symptoms of paralysis. She has had seven children—the last at the age of 41 years. Two of her confinements presented anomalies. During her last pregnancy she entered the hospital with an icterus which was qualified as catarrhal, and which appears not to have coincided with displacement of the liver. The labor was tedious—shoulder presentation—child lived. Since that time the patient has complained of dragging pains in the right side, with the characteristic sensation of an intra-abdominal mass, according with the movements of the body in the lateral decubitus. The discomfort occasioned by this state of affairs has been so great as to incapacitate her for work and necessitate her entrance to the hospital.

The patient is of slender figure. The vertebral column deviates to the left, with posterior convexity. The deformity is confined to the inferior dorsal and lumbar region. The thorax appears well formed in front, but its inferior right border rests almost directly upon the crest of the ilium. Percussion elicits pulmonary resonance down to the sixth rib; then in place of the hepatic dulness, there is tympanism, which increases from above downward.

The abdominal wall is flabby and pendant. A little below the umbilicus one sees a transverse projection, constituted by the sharply defined border of a tumor, moderately consistent, easily movable from right to left. At the junction of the right two-thirds with the left third there is a deep notch. The tumor is smooth, flat on percussion, and does not follow the movements of the diaphragm. It is the liver which has become movable in the abdomen. It is found impossible to replace it in the right hypochondrium because of the dorsal and thoracic deformity. All the functions are normal. It is an acquired infirmity rather than a pathological condition, and the patient is afforded appreciable relief by means of a well-made belt.—*Archives Generales de Medecine*, July, 1882.

OPHTHALMIC APHORISMS.—Dr. J. J. Chisholm, of Baltimore, gives the following valuable aphorisms in a report presented to the Maryland State Medical Society at its last session:

1st.—*Do not blister.* In forty-nine applications

out of fifty, as I find it used by physicians at large, it is an additional and useless torture to the eye disease from which the patient is already suffering.

2nd.—*Do not use nitrate of silver.* As constantly prescribed by general practitioners, it is not beneficial in one case out of one hundred, and therefore is a very painful infliction to the ninety-nine who would have been so very much better off without it.

3rd.—*Do not prescribe sugar of lead.* In every case zinc, tannin or alum is better, and then there is no fear of having insoluble deposits incorporating themselves with the exposed surface of corneal ulcers.

4th.—*Always use weak solutions of the mineral and vegetable astringents* in the treatment of eye inflammations which attack the mucus surfaces, and restrict their application to conjunctival diseases exclusively. One grain of alum, sulphate or chloride of zinc, sulphate of copper or nitrate of silver, in an ounce of water, will in the majority of cases of conjunctival diseases, do much more good and give much less uneasiness than the very painful five and ten grain solutions which are so often injuriously prescribed by physicians.

5th.—*Solution of the sulphate of atropia*, from one to four grains to the ounce of rose water, is an essential eye-drop in the treatment of acute iritis, to break up newly formed adhesions. One drop of the atropia solution in an inflamed eye is a most valuable means of establishing the diagnosis whether iritic complications exist or not, and should be used in most cases of eye inflammation to find out whether there are any adhesions of the pupil to the lens.

6th.—*Eserine in solution of one grain to the ounce of water* is the remedy for purely corneal lesions.

7th.—When physicians are in doubt as to the character of an eye disease, they should seek a consultation from specialists who are more familiar with eye diseases than general practitioners can possibly be. Such timely aid often saves the patient a lifetime of trouble.

If physicians would commit to memory and keep at their finger ends, and ready for use, these simple aphorisms, the amount of mental and bodily suffering which they will prevent in their eye patients is beyond calculation. While all good rules have necessary many exceptions, they may safely follow their simple guidance.—*Ohio Med. Journal*.

IODOFORM DRESSING IN VIENNA.—In the general Hospital, Billroth, Albert, Dittel, Weinlechner use it, and so also do the surgeons in the other large civic and military hospitals here. In Billroth's clinic I have not seen the spray used once. The part to be operated upon is scrubbed with soap and carbolized water, and then carefully carbolized again. The requisite operation is then made. All the instruments are laid in carbolized water, the

sponges also, and before dressing, the wound is thoroughly irrigated with a three per cent. solution. It is then dressed with iodoform gauze instead of the Lister gauze, with no intervening protective. Over the gauze is usually placed a moderately thick layer of absorbent cotton, and then something corresponding to the Mackintosh over this. The whole is then closely and neatly bandaged; the bandage used being quite wide and made out of strong gauze.

If advisable, the wound may be dusted with powdered iodoform. In subperiosteal amputations it is dusted in many cases under the periosteum; in osteo-plastic resections, likewise, between the ends of the bone, and after extirpation of tumors many would sprinkle it upon the inner surface of the flaps. The drainage tube is much less resorted to now than when the strict Lister dressings were used; there being less need for it. Under the influence of iodoform there is much less suppuration, and whatever discharge takes place is more of the nature of a serous exudate. Indications for change of dressing are much as they were under the regime of Lister. An absolute indication for change is an elevation of temperature after it has been for several hours or days normal. Relative indications for the same are pain, and burning and itching in the part as they may seem to call for it.

Inasmuch as iodoform has an actual pain-stilling effect, which is, of course, in its favour, these latter symptoms occur comparatively rarely, and are largely the result of tight or improper bandaging.

Certainly, as an antiseptic, iodoform must rank ahead of carbolic acid. Further than this it undoubtedly promotes absorption more rapidly than any other medicinal agent. And for this reason it is very largely used by the syphilologists and dermatologists here for hastening the subsidence of buboes and of scrofulous adenoid enlargements. They inject it in ethereal solutions; and for the most part with excellent effect.—*Dr. Park, Annals of Anatomy and Surgery.*

ANTISEPTICS IN TYPHOID.—In his service at the Hotel-Dieu, Vulpian has made some comparative observations on the utility of the various antiseptics employed in typhoid fever. Iodoform has not given any good results. This is the more remarkable, since this agent now occupies an important place as a remedy in septic processes. Salicylate of bismuth is an excellent antiseptic, but it is not readily soluble, and hence the large dose necessary to obtain any result—from two to three drachms daily—presents many inconveniences. It is found, also to increase the tendency to nasal and intestinal hemorrhage. Boracic acid, carried up to the dose of three drachms daily, by regular increment of the daily dose, has not done any good. The best results have been achieved

with salicylic acid. Vulpian has administered this in doses of three or four grains every half-hour until the daily quantity has reached the large proportion of three drachms. In some patients, especially in young men, he has produced some cerebral disturbance—a light delirium—in others albuminuria has appeared; but this is by no means an uncommon symptom in typhoid when left to its own course, and in some cases the albuminuria disappears when as much as 200 grains of salicylic acid are taken daily. The real cerebral effect which may, then, be referred to salicylic acid, is a slight delirium. Under the salicylic-acid treatment the temperature falls in forty-eight hours, three to four degrees; and this reduction of the body-heat is more persistent than that effected by carbolic acid. At the same time there ensues a notable amelioration of the general condition of the patient. But Vulpian does not pretend that the mortality from the disease, nor its duration, is notably diminished by the modification in its symptoms thus effected by salicylic acid.

In the course of the discussion on Vulpian's observations, it appears that the central idea of the antiseptic treatment of typhoid is to act on the typhoid germs introduced into the intestinal canal from without. Vulpian gives the preference to salicylic acid because it possesses so little toxic activity *per se*. He objects to the use of the carbolate of sodium for this purpose, because, owing to its solubility, it cannot be accumulated in the blood in sufficient quantity to act on the disease germs. The treatment by purgation during the period of invasion—the prodromal stage—was also considered. One of the modes of the "specific treatment" of typhoid, as pursued by our German colleagues, is the mercurial plan, which consists in the administration of purgative doses (ten grains) of calomel during the first week. Several doses of this kind must act in three ways: sufficient bichloride is produced to act on the typhoid germs as a poison; the germs are removed by a purgative action; the temperature is lowered by the combined result of these actions. The range of temperature has a certain relation to the number and activity of the germs present in the blood. Hence their destruction at an early period becomes very desirable.—*Med. News*, Oct. 14, 1882.

THE NON-IDENTITY OF CROUP AND DIPHTHERIA.—Dr. McGillvary, of Sydney, N. S., writes to the *Philadelphia Medical News* as follows, in regard to the above subject:—In your issue of October 21, there appeared a lecture delivered by Dr. Morell Mackenzie, of London, at Bellevue Hospital Medical College, on "Diphtheria." In that lecture the learned Dr. pronounced croup and diphtheria one and the same disease. This is an utterance *ex cathedra*, and deserves more than passing notice.

I do not think that the *ipse dixit* of this distinguished authority is sufficient to establish his doctrine of identity in regard to those hitherto considered separate diseases. But he goes farther, and states: "I believe though, after all, it is a mere theoretical question." I think it is very much more, not as far as the medical treatment is concerned, but it is of very great importance in regard to the question of contagiousness.

Diphtheria has been regarded as a most contagious disease. Croup has not been so regarded. In the one case it has been the rule to isolate the patient, quarantine the family, and exclude the other children, if there are any, from the public schools for a certain specified time. In the other case there has been no isolating, no quarantining, or limitation of personal freedom. If these diseases are identical, why this exhibition of inconsistency, why this wanton trifling with human life in the neglect of proper precautionary measures? If the members of the medical profession are to be regarded as the guardians of the public health, this question of the identity or non-identity of these diseases is of much more importance than a merely "theoretical question."

During an active practice of twenty years I have had quite a number of cases of membranous croup under my care. During ten of these years there has not been a case of diphtheria in the district, yet during these years an occasional case of true croup would appear, and in none of them was any attempt ever made to prevent the spread of the disease. Yet no second case ever occurred in the same family, nor were any other members of the household afflicted with sore throat of any kind near the time when the cases of croup arose.

In some of the cases that proved fatal, there were quite a number of other little children in the same family. These had constant access to the bed of the suffering one, and after death for two or three days, while the body remained in the house, these little ones would hover around where it was lying, and many fond kisses were showered on the loved form, and yet I have never had a second case in the same family. On the other hand, I have had cases of diphtheria when every effort was put forth to prevent the spread of the disease, and while I might now and again succeed, yet in the large majority of cases the disease would spread in the face of all that I could do.

Now with facts such as these before me, and my experience does not differ from that of many others, is it any wonder that without something more than mere assertion I should still very respectfully maintain that croup and diphtheria are *two* and distinct diseases, the one a highly contagious disease, the other not in the slightest degree contagious.

In order to save the profession from well-merited reproach an account of so much diversity of opinion on this subject cannot a Medical Commission

be appointed to deal with this matter and to arrive at some definite finding?

ATROPINE IN MANIA.—Dr. J. R. Gasquet (Lond. Pract.) finds atropine useful in cases which had been previously benefited by hyoscyamin. He recommends the drug on account of its comparative safety and cheapness.—*Journal of Mental Science*

PERFORATING DUODENAL ULCER.—John P., aged thirty-four, a coachman, and a well-built, active, muscular man, apparently in robust health, consulted me in November, 1881, having been suddenly seized with agonizing pain in the right hypochondriac region, extending downward and to the back. The pulse was slow, of good strength; the skin cool, and in twelve hours he was free from pain. Morphia was injected subcutaneously. During the succeeding six months he had occasional attacks of abdominal pain and sickness, not however, of such severity as to induce him to seek medical aid or to interfere with his work. While in the act of stretching himself to hang a picture, on the evening of April 23, 1881, about an hour after a meal of tea and bread-and-butter, he was again suddenly seized with the same pain as before, and when seen was in a chair, moaning, with the knees drawn up, pale, with a cool skin and a slow but not weak pulse. Bowels had acted during the day. Morphia was again injected with but little relief, and by the following evening he was in a state of profound collapse, and died in twenty-four hours after the seizure.

The abdomen was examined twenty-four hours after death. Rigor mortis complete, with great lividity of surface and rapid decomposition. On opening the abdomen, fetid gas and about two quarts of turbid brown fluid, with yellow floating shreds, escaped, and on raising the transverse colon a round perforation, half an inch in diameter, was seen in the duodenum, which was perfectly free from adhesions. The omentum had limited to some extent the spread of the peritonitis, but there was much soft yellow lymph on the liver and the adjacent bowel. On removing the duodenum, the opening was seen to have a thick rounded margin, firm to the touch, surrounded by folds of mucus membrane radiating from it.

Three years ago George S., aged thirty-six years, while jumping on the hind step of a high gig, was seized with extreme pain in the abdomen, and faintness. When seen by me he presented the phenomenon of collapse in the most intense degree, and for about six hours showed no sign of rallying. Gradually the pulse became perceptible, and warmth returned, but the abdominal pain was extreme, and for three days he lay in a dangerous state. In eight days he had recovered sufficiently to be removed to his home, a distance of some miles, and when heard of six months ago was alive and well. Previously for some months he had occasional at-

tacks of abdominal pain, which he attributed to "cramp"—*W. Henderson, M.B., Glasg. in The Lancet.*

METHODS OF AMPUTATION.—Prof. Stokes in his Address on Surgery, at the meeting of the British Medical Association, reviewed the different methods employed by different surgeons. According to Von Langenbeck Trelat, and others, the preservation of the periosteum is attended with advantage. The formation of a periosteal curtain to cover the cut surface of the bone and its medullary canal is believed to act as a shield or barrier against septic agencies, and diminish the chance of the occurrence of some of the secondary calamities, notably osteomyelitis, following amputations. The method he has in some instances adopted, and with success, is, making a somewhat quadrilateral-shaped flap at the membrane and letting it fall over the cut surface of the bone. Another method, that of M. Trelat, is to detach the membrane all round the bone for fully an inch below the point where the bone had to be divided, making, in fact, a sleeve-shaped flap. This plan must, however, materially protract the operation. This led him to consider some other comparatively recent improvements in the operation of amputation, and to bear his testimony to the great advantages to be derived from the adoption of the principle of long anterior flaps, the chief credit for establishing which belongs to the late Mr. Teale, of Leeds.

Gritti's operation undoubtedly owes its parentage to that of Carden; but, although the retaining of the patella and consequent preservation of the normal attachments of the extensors of the leg is a plan as good as it was original with Gritti, still the details of this method prevented the realization of those advantages which in principle it embodied. Hence the modification which Mr. Stokes terms "supracondyloid amputation"—an operation which retaining the advantages of Gritti's method, eliminates its effects by lengthening the anterior flap, forming a posterior flap one-third the length of the anterior one, saturating the patella and femur together, and, lastly, and most important of all, by making a high femoral section, but one not involving the medullary canal. The special advantages that may be claimed for supracondyloid amputation are:

1. That the posterior surface of the anterior flap being covered with a natural synovial membrane, the chances of suppuration and purulent absorption are diminished.

2. Any possibility of the split patella shifting from its place on the surface of the femur is prevented by the high femoral section, and by saturating the two bones together.

3. The vessels are divided at right angles to their continuity, and not obliquely, as in other flap operations.

4. The existence of a posterior flap diminishes the chances of any wide gaping of the wound; while the anterior flap, being oval, increases the chances of the stump tapering gradually towards its extremity and assuming the form of a rounded cone.

5. The preservation of the abnormal attachments of the extensors of the leg.

These advantages embody those of both flap and circular amputation of the thigh, and, at the same time, eliminate the defects.—*Brit. Medical Journ.*, August 12, 1882.

INFLUENCE OF OCCUPATION ON SYPHILIS.—A paper recently read before the National Society of Medicines, of Lyons, by Dr. Guinard, on this subject, excited considerable discussion, from syphilographers and others, at the time. From a review of the question discussed in it, as to the hygiene of glass-blowers and the prophylaxis of syphilis, in the *Archives of Dermatology*, we learn that RivedeGier, which is to-day, from the industrial point of view, the first and principal centre of the manufacture of glass in France, was twenty years ago, from the medical point of view, the first and principal centre of observation of syphilis transmitted by glass-blowing. It was upon a workman in one of its factories that M. Rollet first recognized and demonstrated, in 1850, the contagiousness of secondary lesions. That abundant opportunity for direct syphilitic infection is furnished by glass-blowing, is shown by the statement that three workmen pass the same tube from mouth to mouth 75 to 85 times hourly. Three epidemics produced in this manner are described in detail. In order to guard against their recurrence, bi-monthly inspections of all the workmen were instituted in some establishments, no one being employed without presenting a certificate of health from the physician in charge. These examinations, although successful in preventing further symptoms, being objected to by some of the workmen, the attempt was made to introduce the use of movable mouth-pieces for the tubes one being furnished each workman. Although this device seemed to answer the purpose at first, it was soon discovered that the men would not use them, and the occurrence of several new cases of buccal chancres caused the bi-monthly inspections to be resumed.—*The College and Clinical Record.*

THE ABORTIVE TREATMENT OF GONORRHOEA.—Believing that gonorrhœa is due to parasites, Dr. W. Watson Cheyne (in the *Lancet*) contends that the proper method to abort the disease is to destroy the parasites. The materials which he employed with the view of destroying the cause of gonorrhœa were chiefly iodoform and eucalyptus oil, and these he still uses. As injections are apt not to penetrate sufficiently far, and as their effect are only momentary, he combines these sub-

stances with cocoa butter, and makes them up in the form of solid rods about 4 in. or 5 in. in length, and about the thickness of a No. 10 catheter. These rods weigh forty grains each, and each contains five grains of iodoform and ten minims of eucalyptus oil, introduced into the urethra, over the orifice of which a pad of boracic lint is applied, and outside this is a large piece of gutta percha tissue, the whole being fastened on by strapping, and retained for four or five hours, if possible. The cocoa butter soon melts, and a solution of iodoform in eucalyptus oil bathes the mucous membrane for some hours. Another rod may then be inserted, and a suitable injection be employed afterwards. This method is only of use, in his experience, before or during the inflammatory stage, and he employs it at any time till the inflammatory symptoms have disappeared, but generally within the first seven or eight days after the commencement of the discharge.—*Medical and Surgical Reporter*.

A NEW METHOD OF DETECTING SMALL STONES IN THE BLADDER.—Dr. S. Cuthbertson Duncan has used for about three years the following method of detecting stone when small or in fragments. He takes a nickle-plated sound, such as is used for that purpose, and holds it over the flame of an ordinary lamp or candle until the point is covered with a thin, black film. After it has become quite cool, it is dipped in a solution of collodion and allowed to dry. He then oils it with castor oil, and introduces it a short distance in the urethra and withdraws it to see if it be injured. If not he proceeds to explore the floor of the bladder with a sweeping lateral movement. If there be a stone or any fragments left after lithotomy, its black covering will be removed in patches, and the bright metal show through. The author thinks this more delicate than Napier's indicator, the point of which is made of lead, blackened by chemical agents; and this very method does not impair the conducting power of the sound in any degree. A short beaked solid steel sound is preferred, with a round handle, which has a flat disk about two inches from the end, at right angles to the curve of the beak, to serve as a guide for the direction of the point. The round handle allows it to be rotated between the index finger and the thumb, the most sensitive part of the hand—two things necessary for rapid and delicate manipulation.—*British Med. Journal*.

A VICTORY OF SCIENCE.—A child nine years of age suddenly disappeared at Alexandria during May last. A short time afterwards his body was found drowned, and the Greeks accused the Jews of having killed Evangeli Fornaraki, after they had taken his blood for their religious rites. It was asserted that the supposed victim had incis-

ions on his tongue and his wrists. An international medical commission was appointed to perform the *post mortem* examination, and this body decided that Evangeli Fornaraki's death was from drowning; that there were no wounds nor trace of wounds on his body. A Greek doctor, M. Counomopoulos, questioned the decision of the commission, refused to accept it, and affirmed that the child's death was not owing to submersion, but to an act of violence, probably strangulation. The Israelite community was in a perilous condition, and appealed to the arbitration of M. Brouardel, the well-known professor of medical jurisprudence, who testified to the absence of the slightest trace of violence, and endorsed the opinion of the commission. He pointed out that, the body having remained fifty hours under water, and having been subsequently exposed to the air during twenty-four hours, there was considerable putrefaction, which modified the symptoms of asphyxia due to submersion, and evident shortly after death; but those that were still present sufficed to show that death resulted from drowning.

WIRE LIGATURES FOR DIVIDED BONES.—Dr. T. Simpson records two cases in the *British Medical Journal*, wherein he obtained excellent results in approximating divided bones with wire ligatures. The first case was a crushed foot; he amputated according to Pirogoff, and fastened the os calcis to the tibia by iron wires. The operation wound was completely healed in ten days, but the wires were left in six weeks. The second case was a resection of the knee joint. The femur and tibia were brought firmly together by two iron wires, one on the outer, the other on the inner aspect; a most complete union was obtained. The operations were performed under antiseptic precautions, and the wire caused no irritation. It is desirable that the apertures made by the drill should be at least a quarter of an inch from the sawn surfaces, and that these surfaces should be very accurately approximated by twisting together the ends of the wires; not more than twice, however, otherwise difficulty will be experienced in removing them. Iron wire, such as that used for the stiletts of elastic gum catheters, in size about No. 22 of the gauge, will usually be found the best.—*The Med. and Surg. Reporter*.

SULPHUR IN WHOOPING COUGH.—Dr. Luton recommends in the treatment of whooping-cough, especially in the convulsive period, the administration of sulphur. Flowers of sulphur 8 to 15 grains, sugar of milk 16 grains—in ten powders, one every two hours; carbonate of iron should be given to keep up the strength, ten grains in the day. Coffee renders good service, and an emetic should be given every two days. Belladonna, which has been considered the most efficacious

remedy in this disease, has been given by Trouseau as follows:—Ext. belladonna four grains, syrup of poppies and simple syrup of each one ounce; one to eight tea-spoonsful to be given in the twenty-four hours, according to age. Dover's powder associated with extract of hemlock has been frequently given with the best results in the formula:—Dover's powder one grain, extract of hemlock in powder one grain, ginger in powder two grains, and sugar four grains, the whole to be given at bed-time, for a child of two years.—*Medical Press*.

AN ALKALOID FROM THE LILY OF THE VALLEY.—Prof. Germain Sée has brought to the notice of the Academy of Medicine a new substance which promises to be of great therapeutic value. It is an alkaloid extracted from the *Convallaria majalis*, or the lily of the valley. This new alkaloid has been discovered by Dr. Hardy, an eminent chemist, who also discovered the alkaloid from the jaborandi, to which he gave the name of "pilocarpin." Convallarine, the name of the new substance, has been experimented with by Prof. Sée, at the Hôtel Dieu, in conjunction with Dr. Hardy, of which hospital the latter is the *chef du laboratoire*. Its therapeutic action is compared with that of digitalis, for which it may be with advantage substituted, as it has none of the inconveniences attributed to digitalis. Dr. Hardy was led to make researches with this plant from the fact of its being generally used by the peasants in Russia, who employ the herb in dropsies, and in all cases requiring increased diuresis. According to Prof. Sée the convallarine is a powerful diuretic, and it has a marked influence on the contraction of the heart, which it regulates, while it lowers the pulse in a remarkable manner.—*Lancet*.

PROPER WAY TO GIVE ACONITE.—In the *London Medical Record*, Dr. William Murrell makes some judicious observations on the correct plan for administering aconite so as to secure its most advantageous action. He observes that aconite does act best in small doses frequently repeated. Many practitioners get no good from aconite because they do not know how to use it. The dose of the tincture recommended in the British Pharmacopœia—from 5 to 15 minims—is absurdly large, and no one with any regard for his patient's safety or his own reputation would ever think of giving it. The best way is to put half a drachm of the tincture in a four-ounce bottle of water, and to tell the patient to take a teaspoonful of this every ten minutes for the first hour, and after this hourly for some hours. Even smaller doses may be given in the case of children. The great indication for the use of aconite is elevation of temperature; the clinical thermometer and aconite bottle should go hand in hand. If properly used,

aconite is one of the most valuable and indispensable drugs in the Pharmacopœia.—*Kansas Med. Index*.

COOLING WATER.—A simple contrivance for cooling water has been invented by M. Toselli, of France. It is described in *Les Mondes*, and consists of a cylindrical cup for holding any liquid, into which may be plunged an inner goblet shaped like an inverted truncated cone, and having a lid that rests upon the outer cup. Putting one hundred and fifty grams of nitrate of ammonia in the inner goblet, filling it with cold water, and stirring it so as to hasten the solution, the temperature of the outer liquid is soon reduced to at least 12° C., or 28° F. The salt may be used for an indefinite period by spreading it upon a plate after each trial, and exposing it to the sun until it crystalizes anew. The inventor prepares a salt which will lower the temperature 28° C., or 50° F., in the warmest countries.—*Louisville Med. News*.

WOUNDS OF THE HEART.—A recent leading article in the *Lancet* shows the fallacy of many popular and even medical opinions respecting the absolute fatality of wounds of the heart. According to this article there is no case of absolutely instantaneous death from cardiac wounds. Wounds of the apex only kill within an hour after the wound has been inflicted. In one instance cited, a man lived twelve hours after the heart had been bisected by a sabre. Out of twenty-nine cases cited in the article in question, only two died within forty-eight hours after receiving the wound. The others lived from four to twenty-eight days; death resulting in most cases from unavoidable complications. Recovery may take place even when the wound is extensive for a bullet has been found imbedded in the muscular wall six years after the receipt of the injury; the patient dying from a disease entirely disconnected with the cardiac wound.—*Chicago Med. Review*.

THE EASY PREPARATION OF CATGUT LIGATURES.—Whether one pins one's faith to the antiseptic system or not, the use of catgut ligatures is so important and so general that we call attention anew to the simple method of preparation which Mr. Lister introduced and published last year. Any doctor can prepare them for himself within a couple of days, and keep them constantly on hand. Add one part of chromic acid and 200 parts carbolic acid to 400 parts of water. To this mixture (as it undergoes change in a short time) add immediately 200 parts of catgut of suitable thickness. After soaking for forty-eight hours, dry the catgut and place it in a mixture of carbolic acid and sweet oil, a drachm and a half to the ounce (1 to 5), in which it may be kept indefinitely.—*Medical News*.

SINGULAR LEGACY TO THE FRENCH GOVERNMENT.—M. Giffard has left to the French government a singular legacy. He desires that it shall be devoted to the establishment of *suicidaria*, or national institutions, in which persons suffering from painful and incurable affections shall be allowed by the use of chloroform and other such agents, to terminate their suffering under the direction of medical experts and with the consent of their friends. M. Giffard secured euthanasia for himself by means of a special apparatus which he devised for inhaling chloroform. M. Renaud has joined the movement for the promotion of painless suicide in France, only stipulating that no man shall be by law entitled to take his own life until he has obtained the consent of his family.—*Brit. Med. Journal*.

THE TREATMENT OF RINGWORM.—A writer in the *British Med. Journal* says:—The difficulty experienced in the treatment of ringworm is known to every one who has seen much of this disease. I therefore think your readers will be glad to hear of a remedy which I have recently used with complete success. Struck with the similarity that exists between the disease known in the East Indies as *dobzitch* and ringworm, and knowing how rapidly the former yields to the application of goa powder, I was induced to try the active principle of this substance, chrysophanic acid, in the proportion of one drachm to one ounce of vaseline. The result has been the rapid destruction of fungus, and consequently a complete cure. Chrysophanic acid has been recommended in the treatment of psoriasis, but I am not aware of it having been used hitherto for ringworm.

HOW TO USE FILIX MAS.—The success of certain German "worm doctors" in using extractum filicis led Herr Dietrich to suppose that the best results are obtained when castor oil is administered immediately after the extract, instead of waiting an hour or two, the extract being more likely to reach the worm undecomposed and less likely to irritate the stomach during its rapid passage. Upon experiment this was confirmed (*Pharm. Zeit.*); in fact, the most favorable results were obtained when the extract and oil were administered together. This, according to Herr Dietrich, is most conveniently done in flexible capsules, each containing 1 gramme of extract and 2 grammes of oil. A dose consisting of six such capsules, preceded as usual by a laxative, has been found quite effective.—*Med. Press and Circular*.

A SUCCESSFUL CASE OF TRANSFUSION.—We are any of us liable at a moment's notice, to be called to one of these dreadful cases of post-partum hemorrhage, and it is comforting to hear of such success as Dr. William Walter records in the *British Medical Journal*. The patient was lying

still and unconscious, lips and face blanched, her eyes had assumed a dull and lifeless appearance, her pulse could be felt only at intervals, her extremities were cold and clammy. It was with great difficulty that a vein could be discovered. About four ounces of defibrinated blood were injected. Almost immediately respiration became distinctly visible and audible. In a quarter of an hour she became conscious. Her recovery progressed without interruption.—*Chicago Med. Review*.

TREATMENT OF MEMBRANOUS DYSMENORRHOEA.—Dr. Orsby (*New York Med. Record*) gives five cases of painful menstruation, accompanied by the shedding of flakes of membrane, successfully treated with calomel in combination with opium. His formula is as follows:—*R.* Ext. opii, six grains; hydrarg. chlo. mit., twelve grains. Divide in twelve pills, one to be given every four hours till the gums are affected. He regards the known efficacy of mercury in all forms of hyperplasia, acute and chronic, as justifying *a priori* its exhibition in a complaint in which the hyperplastic element is recognized by pathologists and his practice has completely confirmed this view. Calomel has been the only salt of mercury tried, as it produces its effect rapidly with little irritation.—*Chicago Med. Review*.

ATROPINE IN THE TREATMENT OF EPILEPSY.—Dr. David advises the treatment of epilepsy by the simultaneous employment of atropine and the bromides of potassium and ammonium. For a period of six months, he orders twenty grains of the bromide of ammonium—thrice daily. At the same time the patient is instructed to take a granule of one milligramme of sulphate of atropine morning and evening. At the end of six months the following pills are prescribed:—

Valerianate of zinc.....	4 centigr.
Extract of belladonna.....	6 milligr.
Arsenious acid.....	2 milligr.
Extract of gentian.....	q. s.

Two of these pills are taken daily during twelve months. Should the faintest symptom of the threatened occurrence of the epilepsy appear the treatment must be kept up for yet another twelve months.—*Lyon Medical*.—*Glasgow Med. Journal*.

MEDICAL EDUCATION IN THE UNITED STATES. The Annual Report of the Commissioner of Education, for the year 1880, has just been issued by the Government, and from it we learn that during the last decade the number of medical institutions, and of medical students in the United States has about doubled, and that the number of instructors has nearly trebled.

The number of "regular" schools is put down at 72, with 1,131 instructors, and 9,876 students.

The "Eclectic" schools number 6, with 65 instructors, and 833 students. The "Homœopathic" schools number 12, with 188 instructors, and 1,220 students. *Med. News.*

TREATMENT OF INFANTILE DIARRHŒA BY POWDERED CHARCOAL.—Dr. Guerin, in referring to a recent communication to the *Academie de Medicine*, made by Bouchardat, remarks that for a long time he has been in the habit of combating infantile diarrhœa by mixing the milk in the sucking-bottle with charcoal powder. He usually adds half a teaspoonful of the powder to one bottle of the milk. The infants take the milk readily, and in a few days the greenish stools of the little patients change to a dark yellow, while their consistence becomes increased. In addition to the admixture of powdered charcoal, the milk is diluted by one-half or one-third of its bulk of sugared water. He has frequently seen intractable summer complaints yield in a few days to this treatment.—*Canada Med. Record.*

HIP-JOINT AMPUTATIONS.—During the past month three cases of amputation at the right hip-joint were performed in England, with the aid of Mr. Davey's lever for controlling hæmorrhage. A case where Mr. McLaren, of Carlisle, operated, lost two ounces of blood; a second patient, under Mr. Cowell's care, at the Westminster Hospital, lost three ounces; and the third case, where Mr. Paul Swain, of Plymouth, performed amputation, with the assistance of Dr. Bampton, lost but one ounce and a half. All these patients are progressing favourably.—*Brit. Med. Journal*, August 12th, 1882

THE SEA-SIDE SANITARY HOTEL OF THE FUTURE.—Anxious guest to hall-boy: "Boy, where are the water-closets?" "Hain't got any, sir; they breeds fever. Boat goes down the harbor every morning. Ladies at nine, gentlemen at ten." "Well, is dinner ready?" "No, sir. We always carbolize the dining-room before meals. Now they are spraying the waiters, sir." Impatiently: "Well, where is your ice-water?" "Tain't healthy. Yonder's our Labarraque mixture flavored to taste. Have a glass, sir?" Guest retires and takes a thymolized julep.

TRAUMATIC TETANUS TREATED WITH ESERINE.—A case of tetanus is reported in the *New Orleans Medical Journal* of a boy aged 11 years, who, being wounded in the foot by a splinter, developed the disease some three weeks afterwards. After chloral, cannabis indica, etc., had been used in vain, eserine, administered in $\frac{1}{4}$ grain doses every hour for several days, gave complete relief. The pupils were dilated on two occasions, but at all other times responded to light. The eserine in-

creased neither the tears, saliva nor defecation.—*Pittsburg Med. Journal.*

M. Dujardin Beaumetz recommends the combination of the bromides and chloral as being very useful in whooping cough. He gives one dessert-spoonful of the mixture in a glass of milk, to which the yolk of an egg has been added, evening and morning.

R Potassii bromidi, 3 ss.
Sodii bromidi, 3 j.
Aminonii bromidi, 3 ss.
Syr. chloral, 3 iss.
Aquæ. 3 ij.

THE CASE OF GUTEAU.—The *Boston Medical and Surgical Journal*, expresses in the following terms what we think will be the verdict of an enlightened posterity: "We feel it our duty to re-iterate the opinion expressed by us from the first, that Guteau was an irresponsible lunatic, and should neither have been tried by an ordinary criminal process nor have been sentenced to death."—*Pacific Medical Journal.*

A NEW USE FOR SALICYLATE OF SODA.—Dr. Theo. M. Kendall writes to the *Lancet* that he derived most gratifying results in a case of severe chalk gout from the use of a lotion of ten grains of salicylate of soda to the ounce. By its use, chalky deposits in the ear were softened, and in four days disappeared, leaving only a small scar.

THE VACATION OF A SUCCESSFUL PRACTITIONER.—*Wife* (to doctor just home from a week's hunting). "Well, James, did you shoot anything?" *Doctor* (sadly).—"No. Awfully bad luck; never killed a thing."

Wife (who knows him—sweetly).—"My dear, you'd have done better if you had stayed at home."

A western professor who, according to the *Peoria Medical Monthly*, discovered the fact that the hair on the mons veneris of sterile women is always straight, was somewhat non-plussed on being asked by a student whether curling of the hair would not cure sterility.

The combination of ergot, belladonna, and iodide of iron is used at Bellevue Hospital, and proves more useful for incontinence of the urine than either of the drugs alone, or in any other combination which has been tried.—*Med. Digest.*

"I wouldn't be in Egypt," said Mrs. McGill, last week, "for all the wealth of Creosote." Seeing a look of astonishment in the face of her auditors, she added: "Creosote, you know, was an old Roman god, and everything he touched turned into gold."

THE CANADA LANCET.

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Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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The LANCET has the largest circulation of any Medical Journal in Canada.

THE GAZETA MEDICA AND THE UNIAO MEDICA.

Among our foreign exchanges there are none which we peruse with more gratification and instruction than the two Brazilian monthlies above-named, both of which, in the Portuguese language, are presented on excellent paper and in charmingly neat and clear type. We wish that we could say half as much in commendation of some of the numerous medical periodicals reaching us in our own tongue.

The July number of the *Gazeta Medica*, along with other highly interesting matter which gives clear evidence of the respectable status of medical education in the great Empire of Brazil, presents its readers with a full report of a "discourse by Dr. A. Pacifico Pereira, pronounced on the occasion of his assuming the chair of General and Pathological Anatomy in the Faculty of Medicine of Bahia, on the 15th of July last. Did our space warrant the indulgence, it would give us great pleasure to present to our readers this truly eloquent and instructive discourse in its entirety. We must, however, content ourselves with the reproduction of a few scattered excerpts, which will, we doubt not, prove acceptable to the readers of the LANCET, who will please bear in mind that they have been taken from various parts, which, in some instances are rather distant from each other.

'Modern medicine,' says Dr. Pereria, "pursues its prospering march, encircled by the numerous cortege of the sciences, and the study of any of its branches cannot be actually accomplished, in a

regular manner, unless by those powerful means of observation and experiment, which penetrate the depths of organization, and unfold the mysteries of life even in the ruins of death itself. We are now crossing a phase of civilization and progression; the scientific movement, which to-day is manifested in all countries, is incontestably superior to that of all preceding epochs. We have the happiness of living under a rule which guarantees to science the free exercise of its rights, without the tyranny of absurd laws, or those fanatical conceits of exquisite sensibility which force the sage physiologists of England to leave their own country, in order to be able freely to proceed in their experimental studies by vivisections, and free from the persecutions of a senseless law and the continual prosecutions of protectoral societies against the so-called 'scientific torture of animals.' Never let us recall to life the times of the ancient Romans, those cultivated and compassionate spirits, who devoted their piteous horror to the infamous study of anatomy, but delighted themselves, within their vast amphitheatres, with the spectacle of Christians torn to pieces by savage beasts, or burning in flames which consumed their pitch-besmeared bodies.

"A short time ago the Minister of the Empire, with that enlightened spirit and profound talent which he has manifested in the brilliant reforms so masterly projected in his programme, used, in relation to the Faculties of Brazil, the following memorable words:—'The instruction in our Faculties is characteristically superficial, *atechnical*; it is absorbed, and it is lost, in theories; it does not tend to awaken, in either the professoriate or their alumni, the spirit of investigation; it recommends to special careers, intelligences unprepared for specialties, and inundates the practical professions with individuals without real initiation into the arts and the applied sciences. It is therefore an urgent necessity to remodel the programmes, to infuse into the courses a truly scientific vitality, to excite in the process of instruction a creative enquiry, arousing throughout, by the side of vigorous practice, the continual exercise of methodical observation, the untiring use of experimental processes, the instruction of facts, of causes, of laws, of relations, and of the mode of execution in our laboratories, our clinics, our offices, our observatories, amphitheatres, museums, galleries of instruments and academic expositions. It is imperative that our Faculties should produce men capable of assimilating science, contributing to its progress, showing clearly its adaptation to the improvement of the conditions of our destiny, and opening to our country a new era of fruitful, reconstructive, independent labour."

It is practical instruction, generalized into all its classes, perfected in all its branches, developed in all superior studies, that gives to nations that

herculean force which rendered Germany an unsailable colossus against a nation which had been reputed the first military power in the world. It is science that protects life, organizes the means of defence and reparation, and multiplies into prodigies of activity and movement the physical forces which are latent in nature. It is from the laboratories, in which observation and experiment have been exercised, with the powerful aid of the innumerable instruments of precision which science now has at her disposal, that have arisen the greater number of those marvellous inventions which have enriched the arts and industries, and have rendered states prosperous, strong and respected. And when nations lavish the best part of their substance on instruments of war, which unprofitably depresses them, is not the development of our centres of instruction, which are the foci of light, and the fountains of public glory, power and prosperity, an object worthy of some sacrifice? None of the civilized nations to-day withholds the resources necessary for the creation or development of its teaching institutions, and among these none has a greater right to the protection of the State than the institutions of medicine. Medical education now exacts a very high degree of intellectual culture. Exalting itself in the social scale by the well known importance of its conquests, modern medicine, the daughter of the fugitive and criminal mother of the time of the Romans, holds to-day seats of nobility, resides in palaces, and walks in company with royalty. Illustrious princes, as Charles Theodore of Bavaria, the able ophthalmologist and operator, studies and practises medicine, honoring with his name the noble profession which has rendered his talents illustrious. Most able physicians, as Bacelli in Italy, and Paul Bert in France, have been elevated to the eminent position of first men in the State, and have framed profound and noteworthy reforms, that mark an epoch of progress throughout their country. The deep-rooted conceits of the old aristocracy, whose glories were reflected merely in the splendour of their arms, have vanished from those most noble seats which have been won by science. Science and old nobility are now joined in honorable embrace, as that of the celebrated German surgeon, Esmarch, with an illustrious princess of his country. Scientific notables have to-day the high respect of Sovereigns, and the interests of science merit their special preferences. When the celebrated Recklinghausen was invited to take the chair of Rokitansky, in Vienna, with the inducements of the high remuneration of 10,000 florins, the Prussian government, anxious to retain the eminent professor at Strasburg, asked him what he desired in order to continue in the university, which he had rendered illustrious by his fruitful instruction. The sage microscopist only requested the erection of a pathologico-ana-

tomical institute in accord with his plans. It was necessary to alter the line of the fortifications of the city in order to raise this magnificent structure, which cost the State a million (of florins ?); but the government preferred this expenditure to the loss of its notable professor. What men have more brilliantly personified the scientific evolution of a country than Virchow in Germany, Botkin in Russia, Bacelli in Italy, and Bert in France, who have raised themselves to the prominent positions of prime politicians, moving with supreme distinction and unsurpassable vigor in their college chairs, in the tribune, and in the furtherance of those vast interests which are embraced in the real progress of a nation? Hippocrates, the Socrates of medicine, abandoning the merely speculative theories and vain hypotheses of the Greek schools, succeeded in placing the bases of science in positive data and observed facts. Galen, the man of the scalpel, the boldest experimenter—as Malgaigne has well named him—the laborious and untiring commentator of Hippocrates, although influenced by the dogmatism of the philosophy of Plato, proclaimed positive observation as the basis of all medical systems. In all the ages that followed, the experimental method was ever gaining ground, as the most reliable guide of medicine, in the investigation of the complicated phenomena of life. Harvey, the great reformer of physiology, who built up the true theory of the circulation, the basis of all modern scientific medicine, was the imponent example pointed to by the celebrated philosopher Descartes, in his famous discourse on the "Method of reasoning and of investigating truth in the sciences." It was after repeated and confirmed demonstrations, during nine years, that the illustrious English physiologist raised, in 1628, his monumental work, which was outlined in his book *De Motu Sanguinis*. John Hunter, dissatisfied with the results of human and comparative anatomy, elevated it to the interrogation of the living in the creation of experimental surgery, that prolific instrument of verification and progress. One of the loftiest spirits of this century, the eminent Professor Billroth, has said, 'I belong to the number of those who do not concede that there is any distinction of real value between the study of a natural phenomenon and its laws, and the study of the human body in a state of disease. There is, in my opinion, but one method of investigating nature and her laws, as also the physiological and morbid conditions of the animal or the human body. The task of the clinic is to employ this method at the bedside of the patient. The art of curing is the consequence, the final result of observation.'

"You are aware of the exceeding services which have been afforded to medicine by the microscope, that most potent instrument of study, equally indispensable to the physician and the naturalist. It

is to it that we owe the exact knowledge of the causes of many diseases, whose producing agents belong to the number of animal and vegetable parasites—the algæ and microscopic organisms—epiphytes and entophytes, ectozozaria and entozozaria, which are now known and described in pathological histology within contestable exactitude. Recent admirable labors on the etiology of tuberculosis, malaria, lepra, chyluria, and hypæmia, further attest the immense value of its services, and we draw some glory from having had some of these studies made in Bahia, which has been a very memorable phase in our history. We require not to demonstrate the importance of microscopic research in the study of embryology and physiology, and the advantages of microscopic diagnosis on clinical study; but it is, above all, in the study of hygiene and of legal medicine, that the microscope has afforded incalculable services, which States recognize as a most valuable guarantee to public health and justice. In countries most advanced, the sanitary police, with its thousands of agents, make microscopic examination of aliments, thus preventing many poisonous consequences and the transmission of diseases, as trichinosis, tuberculosis, carbuncle, and many other parasitic affections, whose causes histology has clearly demonstrated. In the microscopic study of the soil and the air, as well as of aliments, innumerable causes of disease have been discovered, and in pathology no other means has afforded more valuable contributions to the study of the mechanism of morbid processes.”

CAUSES OF CONSUMPTION.

With the view of obtaining information concerning the etiology of tubercular pulmonary phthisis, Dr. Playter of this city issued a series of questions to a large number of physicians in Canada and the United States. The questions related to the age, sex, temperament, occupation, general structure, habits, and ancestry of the patients. About 250 physicians replied, citing cases in practice, and the Dr. has prepared from these cases a concise report, which is before us, containing some valuable, practical information, and from which we gather the following:—The average age of the patients was 27 years; 46 per cent. were males, and 54 per cent. females: only 28 per cent. were married. The circumference of the chest was in every case much below the average of vigorous persons of the same height, being only 31 ½ inches; the average height being 5 feet 5 ½ inches. About 55 per cent. had light blue eyes and light hair, and the nervous temperament largely prevailed. Two-

thirds of the patients had been engaged in indoor, sedentary occupations, and spent but little time in the open air. Much the greater part of them had slept in small unventilated bedrooms, two in a bed; had not usually worn flannel next the skin, nor used habitually any form of bath. The general habits of nearly all had been good, and but very few had used alcoholic spirits to excess.

In the deductions drawn, it is stated that the “analysis of cases agrees with what statistics in Ontario and most other countries have taught us, viz., that consumption is much more fatal in the third decenniad of life,—between the ages of 20 and 30 years, than in any other decennial period—when the period of light-hearted, irresponsible youth has passed away, and the stern realities and responsibilities of life have to be faced and assumed; and, also, that more females than males die of the disease.” We had not before observed any statistics showing that much the larger proportion of those who die of consumption are unmarried. Of the cases herein reported, nearly three-fourths had not entered the married state. Though celibacy in these cases may have had but little connection with cause and effect, it is not improbable, the Dr. argues, that marriage, in certain conditions and certain stages of the disease, is unfavorable to the development of consumption. It appears from the report that any special influence or matter of a direct or specific hereditary character, as a factor in the causation of consumption in adults, or even in youths, is not of such constancy and importance as has been commonly supposed. In only a little more than one-half (53 per cent.) had any relatives been known to have died of the disease; and in not much more than one-third (36 per cent.) had any ancestors—parents or grandparents—from whom alone it could have been inherited, died of it. More than this in favor of heredity, as Dr. Playter states, could doubtless be said of scarlet fever and measles. But, in so far as configuration and structure of the body, and the relative size and vigor of different organs to each other are influenced by parentage, hereditary influence becomes a very important causative factor. Indeed about all that is inherited, he thinks, is want of general stamina from defective construction.

One of the most marked features, and perhaps the most important one, brought out in the analy-

sis of the cases, is the evidence that those who die of the disease under consideration have a small pulmonary capacity—a small, contracted chest. This is shown not only in the average of the cases, but in every case; in not one did the circumference of the chest even approximate that of a well developed individual of the same height and weight. According to the best authorities the circumference of the chest around or on a level with the nipples should be, for good development, equal to one-half the height, plus one-fifteenth the height, of the individual. The circumference of the chest, therefore, of one whose stature is 5 feet 5½ inches—the average height of the cases above reported upon—should be, according to that, at least 37 inches; whereas the average circumference of the chest in these cases was only 31½ inches, or only about five-sixths of that demanded by health and good natural development. In about half the cases the chest was flat as well as small in circumference. While persons with small lungs had long been looked upon with suspicion and regarded as being predisposed to pulmonary phthisis, we had not seen any statistics showing so conclusively that consumptives have so universally small a respiratory capacity.

In nearly all the cases the patients had been small or moderate eaters and had used but little oleaginous food except butter; they could not, it would appear, consume enough oxygen to utilize the digested products of a full diet, especially that containing much carbonaceous matter. Dr. Playter very properly suggests that this point should be taken into consideration before prescribing a highly carbonaceous diet, and may indicate why so many of this class will not readily tolerate cod liver oil and kindred remedies. But few suffered from indigestion; they could readily digest all the system could utilize with its small respiratory capacity.

The average weight of the cases reported was only 133½ pounds, while an individual 5 feet 5½ inches in height should weigh at least 140 pounds. Another marked feature in the analysis of the cases is, that nearly three-fourths of the patients had resided in a locality favoring a humid, cool atmosphere, confirming the results of the investigations many years ago of Drs. Buchanan and Bowditch, that dampness of soil, in a large measure if not wholly by giving rise to dampness of atmosphere, favored the development of consumption.

MEDICAL BANQUETS.

The annually recurring medical banquet has now come to be an established institution in nearly all the medical colleges in Canada, and is looked forward to with much interest and pleasure, by both students and professors. The custom is a good one, as it affords the faculty and students and a few friends an opportunity of spending a social evening together. The invited guests are nearly all representative men, and they have each, or nearly all, an opportunity of addressing a few words to the students; an opportunity is also afforded for the expression of different views upon matters affecting the interest of the profession. The arrangements for the dinner, the issuing of invitations, receiving the guests, and arranging their seats at the table are all under the management of the students, and reflect no small credit upon the manner in which the several duties are performed, and their capabilities to entertain their friends in a royal manner. Glee-Clubs are formed in each of the schools, and the proceedings of the evening are enlivened by songs, and also by the presence of a Band of music. One commendable feature of these banquets is that they are carried out on strictly temperance principles.

The Sixth annual banquet of Trinity Medical College, was held in the Rossin House on the 8th ult., and was successful in the highest degree. A large number of distinguished guests were present, besides many graduates and undergraduates of the College. Mr. F. W. Dickson, a fourth year student presided. After ample justice had been done to the good things provided, the Chairman delivered an address in which he spoke of the importance of the medical profession and the necessity for a thorough training in medicine. The doctor, he said, ushered the human being into existence, stood by him through life, and not unfrequently helped him out. He eulogized Trinity Medical College as a place where the embryo *medicus* might be fully developed, and from which he might go forth into the world a full-fledged and reliable practitioner. During the last few years Trinity has become famous as a medical training school, and to-day stands second to none on the continent, the list of students ever increasing, this year, exceeding all heretofore,—from the Maritime Provinces and Prince Edward Island in the east, Jamaica in the south, and from many of the Western States, as far as

Oregon. Letters of regret were read from several those unable to attend, among others, one from the Dean of McGill medical college, tendering cordial greetings and best wishes for Trinity college which was enthusiastically received. The usual loyal and patriotic toasts were proposed and heartily responded to. Other toasts followed in rapid succession. The "Army, Navy and Volunteers" was responded to by Captain Drayton; "Dominion and Provincial Legislatures," responded to by Dr. Beaty, M. P., Hon. G. W. Allan, and Mr. Mulock, M. P.; "Mayor and Corporation," responded to by the Mayor; "The Press," responded to by Drs. Cameron and Fulton, and Mr. Pirie; "Universities with which we are affiliated and sister institutions," responded to by Hon. G. W. Allan, Mr. Mulock, Principal Caven, Principal Castle, and Mr. Buchanan. "The College of Physicians and Surgeons of Ontario," responded to by Dr. Canniff. "The Learned Professions," responded to by Mr. Goldwin Smith. Then followed the toast of the evening, "Trinity Medical College, and Graduates and Undergraduates," which was received with great applause.

Dr. Geikie, Dean of the Faculty, in responding said, amongst other things, that the regular and steady growth of the school was very satisfactory to the faculty, and to its friends everywhere. He gave the following figures:—In 1874-5, the class numbered 76; in 1877-8, the class numbered 128; in 1880-1, the class numbered 136; in 1881-2, the class numbered 168; in 1882-3, (the present year) the class numbered 188. He said the faculty had greatly improved the equipments of the school, furnishing it with every modern appliance, to promote practical instruction in the various branches. He emphasized very strongly the benefits being derived from the teaching of practical medicine and surgery at the hospital, clinical instruction being given every day in medicine and surgery in connection with the outdoor and indoor patients at that institution. He spoke of the arrangements and management of the Hospital as reflecting the greatest credit upon all concerned; and that to the Board of Trustees and the resident medical officer, Dr. O'Reilly, the students and the whole public owe a very great debt of gratitude. The doctor finished his speech by contrasting the advantages enjoyed now by students studying in Toronto, which are not exceeded, if equalled, throughout the Dominion,

with the state of things prevailing twenty-five or thirty years back. The toast was also responded to by Dr. G. O'Reilly, Mr. Casgrain, Mr. Freeman, and Mr. Lang.

The concluding toasts were "Toronto General Hospital," responded to by Dr. G. O'Reilly, "The Ladies," responded to by Dr. Teskey, and a very pleasant evening's entertainment was brought to a close.

The Ninth annual dinner of the Toronto School of Medicine was celebrated in the Pavillion of the Horticultural Gardens on the 14th ult. A new departure was inaugurated by the admission of ladies in the galleries to witness the proceedings, and if one might judge from the numbers present and the cordial interest they seemed to take in the proceedings the innovation must be considered a success. Whether, as the morning papers stated, that interest was mingled with a tinge of jealousy, at the more favored position of the sterner sex in the arena, in having all the good things to themselves is not known, but certainly the wish given expression to by one or two of the speakers, that next year the annual gathering should take the form of a conversazione, must have engendered a responsive feeling in the minds of their fair hearers. The hall was profusely and artistically decorated with flags, and the band of the Queen's Own enlivened the proceedings with choice selections. There were a large number of guests and friends of the school present, yet the hall seemed sparsely filled, as its large size was somewhat out of proportion to the numbers present. The chair was occupied by Mr. H. S. Clerk. After the *Dinner* the Chairman delivered an address, in which he thanked his fellow students for placing him in the position he occupied, and also welcomed the guests who had honored them with their presence. He alluded to the change which he hoped met with their approval in beholding the beautiful countenances and bright eyes of the fair ones looking down upon them. The Ladies of Toronto were no strangers to the medical students; they frequently met at the Hospital and other places on their mutual errands of mercy. He also emphatically resented the indignities heaped upon the medical students, and counselled greater forbearance. In conclusion he expressed a hope that on some future occasion a conversazione would supplant the annual dinner so that the ladies could the better enjoy themselves. After

the toasts of "the Queen" and "the Governor-General and Lieutenant-Governors," the Chairman proposed "the Dominion Parliament and Parliament of Ontario," which was responded to by Mr. W. Mulock, M. P.

Mr. Stewart, vice-chairman, then proposed "Universities, Colleges, and Sister Institutions." He coupled with the toast the names of Chancellor Blake, Rev. Dr. Dewart, Prof. McVicar, Principal Caven, Dr. Fulton, and Mr. Davidson, all of whom responded in appropriate terms.

The other toasts were:—"The Sister Professions," responded to by Rev. Mr. Pearson, Principal Buchan and D. Beaty, M.P.; "Our Faculty," responded to by Drs. Aikins and Richardson; "Graduates and Graduating Class," responded to by Dr. McLaughlin, M.P.P., and others; "The Toronto General Hospital," responded to by Dr. O'Reilly; "The Freshmen" and "The Ladies," completed the list of toasts, and the company dispersed after having spent a very enjoyable evening.

AARON H. DAVID, M.D., L.R.C.S., E.,
D.C.I.

The subject of the following notice was one of the oldest and most esteemed medical practitioners in Montreal. Dr. David was born in 1812, a native of Montreal, and commenced his medical studies in McGill College; he finished his course in the University of Edinburgh, graduating in honors. Returning to Canada, he practiced for a few years in Three Rivers, Que., and returned to Montreal in 1844, where he has resided since, and has been an active, zealous member of the profession. In 1852 he, with others, started the old St. Lawrence School of Medicine, and the same year, assisted by the late Dr. R. L. McDonnell, founded the *Canada Medical Journal*, both of which were soon discontinued. In 1870, with the late Dr. Smallwood, and others, he established the Medical Faculty of Bishop's College, of which he was Dean and Prof. of Practice of Medicine until ill-health compelled him to resign. Dr. David was also long and favorably known as the General Secretary of the Canada Medical Association, and ever took a warm interest in its success. His geniality and amiable character made him a general

favorite. He was for many years surgeon of the 5th Fusiliers, and served with them during the Fenian raid. He was also up to the time of his death, a Governor of the College of Physicians and Surgeons of Quebec; President of the Natural History College of Montreal; Corresponding Member of the Literary and Historical Society of Quebec; Extraordinary Member of the Royal Medical Society of Edinburgh; Member of the British Association for the Advancement of Science, etc. Dr. David's loss leaves a blank which will not soon be filled. He was greatly respected by young and old, both within and without the profession, and many of his warm friends will be pained to hear of his death. He was a most able and conscientious practitioner; a man of strict integrity of character, gentlemanly instincts, and a high sense of honor. He suffered for upwards of two years from cancer of the rectum, and bore his painful illness with great Christian fortitude and resignation, and even retained a degree of cheerfulness which was surprising to his friends. His family has our heartfelt sympathy, and the sympathy of all who knew the deceased.

JOHN R. DICKSON, M.D., F.R.C.S., EDIN., &c.

We regret to announce the death of Dr. Dickson, of Kingston, at the comparatively early age of sixty-three years. He had been suffering from paralysis for some time past, and although his death was soon to be anticipated, it was unexpectedly sudden in the end. He came to Canada in 1837, and settled in Peterboro, where he practised for several years, but finding the work too laborious, he removed to Kingston. In 1854, he, along with others, established a medical school in connection with the University of Queen's College, and was appointed professor of surgery in the new school. This school subsequently became incorporated as the Royal College of Physicians and Surgeons in 1866. Dr. Dickson was the possessor of a number of medical degrees and diplomas, and held several very important appointments. He received the degree of M.D. in the University of New York in 1842, and M.D. in the University of Queen's College in 1863. He was also a member of the Royal College of Surgeons, Eng., member of the Royal College of Physicians, London, and Fellow of the Royal College of Surgeons,

Edin. In 1874 he was appointed surgeon to the Provincial Penitentiary, and was medical superintendent of the Rockwood asylum for insane from 1874 to 1879. He was a prominent member of the Ontario Medical Council during the first three years of its existence, from 1866-69, and was elected president for the first year. Ill health compelled him several years ago to resign all public appointments, and also to discontinue his practice. He was a man of sterling character, indomitable will, great energy and perseverance, and has left his impress upon everything he undertook. He was greatly respected by all who knew him, and his loss will be much felt by his family and friends. One of his sons is practising medicine at Wolfe Island, Kingston.

VITAL STATISTICS.—From present indications there seems every prospect that the Dominion government is about to concede the request of the medical profession as expressed by the Canada Medical Association. The report of the special committee on Sanitation and Vital Statistics presented by the chairman, Dr. Canniff, and adopted by the association, was to the following effect :

1. That for the present the sanitary statistics shall be confined to the cities and larger towns of the Dominion, such to be published monthly, and the deductions therefrom to be circulated in the various centres specified. 2. That for the future guidance in sanitary matters a commission should be appointed by the Dominion Government, in order, in consultation and co-operation with the various Local Governments, to arrive at some common basis of action in carrying out such sanitary measures as may be necessary for the guidance of the Dominion Government. 3. That such commission shall consist of at least two or more medical men with a legal adviser, whose duty it shall be to examine carefully into the various requirements of such action in sanitary matters.

We observe from the daily press that arrangements have been, or are being made, to hold a convention at Ottawa in relation to State Hygiene. We presume that this action is in accordance with the spirit of the preceding resolutions. As the Dominion Government has declared its desire to accede, as far as may seem practicable, to the earnestly expressed request of the profession,

actuated by a feeling not seemingly in its own interest, we presume that the movement is being carried out in harmony with the opinion of the committee to whom was intrusted this most important national work.

DEATH FROM CHLOROFORM.—Another of those sad occurrences which are occasionally to be expected when powerful remedies are used to produce insensibility to pain, took place in Quebec. The patient was a boy, ten years of age, about to have a tooth extracted. The anæsthetic was administered by Dr. Russel, jr., with every possible care. On the first indication of alarming symptoms, the Dr. immediately discontinued the inhalation and commenced artificial respiration. In this case life was maintained for about two hours after the discontinuance of the chloroform, the patient seeming to die of gradual paralysis of the nerves of respiration and circulation.

THE ONTARIO MEDICAL REGISTER.—The new edition of the *Ontario Medical Register* has just been issued from the press. It is a great improvement upon previous editions, and we congratulate Dr. Pyne upon its very creditable appearance. Besides the names of the members of the College, 1700 in number, it contains the "Ontario Medical Act," rules and regulations of the Council, the boundaries of the twelve territorial divisions, and remarks on the penal clauses of the Act for the guidance of members. There is one practitioner to every 1125 inhabitants in Ontario.

HOME FOR LITTLE BOYS.—We take pleasure in calling attention to the establishment of a home for little boys by the family of a deceased physician—the Misses Cole, of Clinton, Ont. The home will be especially suitable for widowers' sons and those whose parents are much away from home, or unable through illness to take charge of them. For terms, etc., see advertisement.

TRINITY UNIVERSITY CONVOCATION.—The annual Convocation of Trinity College was held on the 16th ult. The following gentlemen received degrees in medicine :—

M.B.—Aléxander Cameron, Walter Henry Day.

M.D.C.M.—W. T. Stuart, C. Sheard, L. Teskey, Edward S. Wilson, James W. L. Hunter, Arthur D. Smith, Reginald W. Belt.

C.M.—W. H. Macdonald, R. H. Barkwell.

M.D.—W. M. Brett, Archibald C. Gaviller, Philip J. Strathy, Frederick D. Canfield.

The Professors of the Faculty of Trinity Medical College were admitted *ad eundem gradum*.

PERSONALS.—Dr. J. R. Clark, of Trinity Medical College, who has been absent in Europe for several years, has commenced practice in Cobourg. He has taken the double qualification of L.R.C.P. & S., Edin.

Dr. H. E. Heyd, of Brantford, and Dr. K. McKenzie, of Richmond, Que., have recently returned from Europe, where they have been pursuing their professional studies for some time past. Dr. R. Bentley, of Kettleby, has also returned after a long absence.

Dr. Shupe, formerly of Stevensville, has removed to Port Elgin, Ont.

A SAD CALAMITY.—No greater calamity could befall any one than that which recently occurred to Dr. E. C. Seguin, the noted neurologist, of New York. His wife, in a fit of temporary insanity, shot all her little children—three in number—and afterwards herself. Mrs. Seguin is said to have been of an amiable disposition, kind and devoted to her husband, and showed no signs of insanity except occasional attacks of melancholia. Her husband had made arrangements for her to accompany him on a pleasure trip on the following day, but on coming home in the evening found himself suddenly deprived of his entire family.

APPOINTMENTS.—Mr. John Galbraith. Prof. of Engineering in the School of Practical Science, has been appointed a member of the Ontario Board of Health.—Dr. J. M. Lefevre, of Brockville, has been appointed surgeon in one of the eastern sections of the Canada Pacific Railway.—Dr. G. R. J. Crawford, of Canterbury Station, N.B., has been appointed House Surgeon to the St. John General Hospital.—Mr. H. R. Casgrain, of Trinity Medical College, has been appointed Assistant to the resident staff of the Toronto General Hospital.

NEW YORK MEDICAL JOURNAL.—After the 1st of January, 1883, the *New York Medical Journal* will appear as a weekly instead of a monthly as formerly. We wish the *Journal* success in the new departure.

L.R.C.P., EDIN.—A. D. Nasmith, M.D., of Toronto, has successfully passed the examination for the double qualification of L.R.C.P., Edin., and L.F.P. & S., Glasgow.

We regret to learn that Sir Thos. Watson, author of Watson's Practice of Medicine, who is now in his ninety-first year, is so seriously ill that his life is despaired of.

Dr. E. B. Sparham, who was sentenced a few years ago to imprisonment for life, has been pardoned by the Minister of Justice.

The death of Dr. Henry Draper, of the Medical Department of the University of New York, at the early age of 45 years, is announced.

CORONER.—Dr. J. P. Rankin, of Tavistock, Ont., has been appointed coroner for the Counties of Oxford and Perth.

The death of George Critchett, F.R.C.S., Eng., the celebrated oculist, at the age of 60 years, is announced in our British exchanges.

Dr. J. F. W. Howitt, of Toronto, has successfully passed his primary examination before the Royal College of Surgeons, England.

Births, Marriages and Deaths.

In Toronto, on the 14th ult., G. S. Ryerson, M.D., L.R.C.P. & S., Edin., Oculist and Aurist, Toronto, to Mary Amelia, second daughter of Jas. Crowther, Esq.

On the 15th ult., Hon. Dr. Duncan Campbell, of Port Hood, N.S., member of the N.S. Government, in the 38th year of his age.

On the 7th of October, Dr. John Fraser, of Font Hill, in the 76th year of his age.

In Hamilton, Ont., on the 1st ult., Dr. Edwin Henwood, aged 67 years.

In Brantford, Ont., on the 24th ult., Dr. W. H. Bacon, in the 60th year of his age.

* * * The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.

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Original Communications.

REPORT ON OPHTHALMOLOGY*

BY A. M. ROSEBRUGH, M. D. TORONTO.

The ophthalmoscope was invented in 1851. Von Græfö commenced his brilliant career the same year, or the year previous. In 1854 Von Græfö and Donders established the "Archives für Ophthalmologie," and in 1860 Prof. Donders published his great work on "Accommodation and Refraction." About the same time Snellen constructed his "Test Types." In 1865 Von Græfö discovered that iridectomy will relieve intraocular pressure in glaucoma; and in 1867 he gave the world the modern operation for hard cataract. The invention of the ophthalmoscope, then, may be said to mark the commencement of a new era in ophthalmic medicine and surgery. We will not pause even to enumerate the pathological conditions that may be observed with the eye mirror. We may say in general terms, however, that, with the exception of the ciliary processes, and a narrow zone of the anterior expanse of the retina, all the structures of the inner eye, with the aid of the ophthalmoscope, are brought under the eye of the observer. Except in a few cases where the disease has no ocular expression, the ophthalmoscope enables us to find a cause for all forms of blindness formerly called amaurosis and amblyopia. The ophthalmoscope is also a valuable aid in diagnosing diseases of nervous centres, as, for instance, coarse disease at the base of the brain; and quite recently the ophthalmoscope has been recommended as a means of diagnosing diseases of the inner ear.

The treatise of Prof. Donders, of Utrecht on the optical defects of the eye, which appeared in Holland in 1860, and which was afterwards translated

and published by the New Sydenham Society, is still a standard text-book. In the choice of spectacles, Donders' great work is the foundation of our therapeutics. Donders was enabled to eliminate the variable from the fixed refraction of the eye, and discovered, *first*, that presbyopia is not a refractive error, but is simply a gradual lessening of the focal adjusting power, or accommodation of the eye, and usually commences as early as at the age of 15 years; secondly, that in the original structure of the globe, the antero-posterior diameter of the eye may be elongated or shortened, causing excessive or deficient refraction, and called respectively myopia and hyperopia; thirdly that the refraction of the different meridians of the eye may be unequal. Thus, in the vertical meridian, for instance, the refraction may be normal, while the horizontal meridian may be either myopic or hyperopic, and that this condition called astigmatism, may be simple, or it may be complicated with myopia or hyperopia. For paralyzing the accommodation, Donders dropped into the conjunctival sac a few drops of a solution of atropine, 4 grs. to the ounce. He also demonstrated that errors of refraction are factors in the causation of strabismus,—that fully 75 per cent. of cases of convergent strabismus are caused by hyperopia, that a large number of cases of divergent strabismus are due to myopia, and that the development of the strabismus may be arrested by the early correction of the optical defect by the use of suitable spectacles, and also that after a tenotomy has been performed the wearing of the spectacles is often necessary to prevent a relapse of the deformity. More recently, it has been satisfactorily demonstrated that the irritation arising from uncorrected errors of refraction may cause various eye troubles, such as phlyctenular inflammation of the cornea, or conjunctiva, blepharitis marginalis, neuro-retinal congestion, &c.

Ophthalmology has been wonderfully advanced by the adoption of Standard Test Types. The average acuteness of vision in the visual line—that is, at the *fovea centralis retinæ* is taken as $\frac{1}{10}$ of a degree. Capital letters, varying in size from $\frac{1}{4}$ to 4 inches in length, printed on a large card are so constructed that the diameter of the perpendicular stroke of each series of letters shall equal exactly $\frac{1}{60}$ of a degree, when viewed from a fixed distance designated: thus, No. 15 should be seen

*Read before the Ontario Medical Association, June, 1882.

distinctly at 15 feet, No. 20 at 20 feet, No. 100 at 100 feet, and so on. When a patient can distinguish, say No. 20 at 20 feet, his vision is considered normal, and it is indicated by the fraction $\frac{20}{20}$, or unity. If, however, he can only distinguish No. 10 at 20 feet, his vision would be expressed by the fraction $\frac{10}{20}$ ($=\frac{1}{2}$)—that is, the distance at which the letters are actually seen divided by the distance at which the letters might be seen with normal vision gives the fraction of acuity of vision. In modern ophthalmology, in addition to making a careful record of the acuteness of vision in the visual line, note is also made of the field of vision. This may be clouded or completely obliterated in certain directions, and may be caused by detachment of the retina, hæmorrhagic effusions, tumours, &c. Before giving a favourable prognosis in cataract cases, the extent of the visual field is carefully examined. In certain cases colour tests are also used, as it has of late been demonstrated that colour blindness may be an acquired lesion. In tobacco amaurosis, for instance, a seaman or a railroad man may be able to attend to his ordinary duties, but fail to distinguish between a red and a green signal. Hence such persons should be examined periodically for colour blindness.

We are indebted to Von Græfe for the modern treatment of glaucoma. He had noted the fact that iridectomy reduces the normal tension of the eye. When, therefore, it was subsequently discovered, by the combined aid of the ophthalmoscope and pathological examination, that glaucoma is caused by excessive intraocular pressure, Von Græfe immediately tried the effect of iridectomy in relieving the intraocular pressure, and gave to the world a cure for an hitherto incurable disease.

During the last 15 or 20 years, a complete revolution has taken place in the treatment of cataract. By the combined use of the ophthalmoscope and oblique illumination, the different varieties of cataract can be differentiated, and the state of the development of the opacity accurately ascertained. With facilities for making an accurate diagnosis, improved operative procedures, and with the judicious adaption of the operation in each case, the results of treatment are at least as satisfactory as in any other class of surgical cases. Statistics have been collected of 11,000 cases of hard cataract treated by the old "flap" operation

previous to 1868; and of 11,000 cases treated by the modern operation,—showing that with the former there was a total loss of sight in 16.7 per cent. of the cases, and with the latter operation the total loss was 6.5 per cent.; still further that of 1,000 cases of hard cataract operated upon by Von Græfe between 1865 and 1869, the total loss was less than 3 per cent. In the modern operation, for which we are indebted to Von Græfe, the triangular Beer's Knife and the semicircular corneal flap are discarded, and a narrow knife and a straighter and more peripheral cut substituted. The cut is made more nearly in the direction of a great circle of the globe, and a sector of the iris is removed, so as to facilitate the extrusion of the lens, and prevent prolapse of the iris. It is, perhaps, almost unnecessary to state, that the old operation of "couching," or pushing the lens back into the vitreous, has been completely abandoned, as it was found that fully 50 per cent. of the cases thus treated were ultimately lost from destructive inflammation.

The treatment of strabismus and paralysis of ocular muscles in late years has been modified and improved. By the operation called "layering forward," the insertion of a weakened muscle is advanced nearer the cornea. Tenotomy of a contracted muscle is performed subconjunctivally. A conjunctival suture is used to modify the effect of an operation, and prismatic spectacles are used to relieve diplopia and muscular strain.

With the modern improved methods of preparing tissue for the microscope, there has been an advance in our knowledge of the normal and pathological histology of the eye, but we cannot stop to particularize. Quite recently the extraordinary discovery has been made that in the living retina there is secreted a photo-chemical matter, called "visual purple," which is bleached in a bright light, and re-secreted in the dark. It is said to be an albuminoid secretion, confined to the layer of rods, and is believed to be a conservative element which enables the eye, in conjunction with the iris, to adapt itself to variations in the intensity of the light.

An advance has been made in our knowledge of the etiology of glaucoma. The prominent symptom in glaucoma is excessive intraocular tension. The eye is hard and unyielding. Until recently, this condition was supposed to depend upon hyper-

secretion of the choroid. It is now known that this is not necessarily the case, and that the loss of equilibrium of intraocular pressure may be caused by any interference with exosmosis or filtration from the eye, that pressure from the peripheral part of the iris against Fontana's spaces and Schlemm's canal—at the so-called "iritic angle,"—causes glaucoma, not from any increase in the secretion from iris or choroid, it is claimed, but by mechanically interfering with exosmosis or filtration through the trabeculae of the anterior scleral ring. Iridectomy, or the removal of about $\frac{1}{2}$ of the iris, was supposed to relieve the intraocular pressure by removing a large secreting surface, but its action is now believed to depend partly upon the removal of pressure at the iritic angle, and partly upon filtration being favoured by the cicatrix, in the anterior scleral ring.

The construction of the ophthalmoscope has been greatly improved of late years. The form now in general use is Knapp's and Loring's. A disc is secured behind the mirror which can be rotated, and which carries a series of very small convex and concave lenses behind the central aperture of the mirror. By this convenient arrangement any optical defect either in the eye of the observer, or in the eye under observation, is counterbalanced. By suspending the accommodation and rotating the lenses behind the mirror, the latter being brought close to the eye under observation, the refraction can be, at least approximately determined, and by this method alone it is possible to prescribe the proper correcting spectacles; but this method of examination is rather resorted to for the purpose of confirming the result of the examination made with the test types and trial glasses,—with or without paralyzing the accommodation.

Among the operative procedures which may be said to be on trial may be mentioned opticociliary neurotomy as a substitute for enucleation; sclerotomy as a substitute for iridectomy in certain forms of glaucoma, and Loring's dissection of the iris for closed pupil after cataract operation.

Eserine is being substituted for atropine in connection with cataract operations, and in the after treatment of extraction, the eye is now less interfered with than formerly. If there is no œdema of, or discharge from between the eyelids, it is now advised to keep the eye closed for about seven days after the operation. For the removal of chips of

iron or steel from the interior of the eye, the permanent magnet is giving place to the more powerful electro-magnet.

Antisepsis, which has proved a boon in general surgery, has been tried in ophthalmic surgery, but not with encouraging results; and, moreover, the practical difficulties in the way of carrying out strictly antiseptic treatment in ordinary eye operations, seem to be almost insurmountable. The eye is, however, sponged with antiseptic solutions before and after operations, and caution is used to prevent the infection of wounds from blennorrhœa of the lachrymal sac, the discharges from trachoma, &c., and where atropine or eserine is used continuously for some time, it is considered advisable that these salts (which, by-the-way, should be quite neutral) should be dissolved in a two or three per cent. solution of boracic acid. Boracic acid solution are also used in cases where there is purulent discharge.

Among the new remedies recently introduced into ophthalmic practice, duboisia and homatropine dilate the pupil, while eserine and pilocarpine contract it. Duboisia can be substituted for atropine in the exceptional cases where the latter is found to irritate the conjunctiva. Atropine is the most reliable for dilating the pupil in plastic iritis. It also acts as an anodyne to the sensitive nerves of the iris and cornea. But it is contra-indicated where there is a tendency to glaucomatous complications, or in serous iritis, on account of its tendency to increase intraocular tension; in the latter case, homatropine is substituted for the atropine. In cases where it is simply desirable to dilate the pupil temporarily, as, for instance, for an ophthalmoscopic examination, homatropine, used in a weak solution, will dilate the pupil without paralyzing the accommodation, and its effect upon the pupil is more transitory than that of atropine. Used in stronger solutions, say 5 or 6 grains to the ounce, homatropine will paralyze the accommodation, and the paralysis is not nearly so persistent as it is after using atropine solutions. This is an advantage in favour of homatropine in treating anomalies of refraction. Eserine is used both for contracting the pupil and relieving intraocular tension. It is a valuable adjunct in the treatment of glaucoma, and in some cases may ward off an inflammatory attack. By relieving intraocular pressure, it is a valuable remedy in suppurative and ulcerative dis-

eases of the cornea. Pilocarpine is not so powerful a myotic as eserine, and is not so much used as a local application. Used hypodermically, however, in $\frac{1}{4}$ or $\frac{1}{3}$ grain doses, it acts beneficially upon scleral and episcleral disease, and is recommended for sub-retinal effusion and opacities of the vitreous.

Pagenstecher thinks massage occupies a very important place in ocular therapeutics. He uses either circular or radial friction of the eye with the finger against the closed lid, making very light and rapid motion. It is recommended in old corneal opacities, in pustular conjunctivitis, in scleritis and episcleritis. Pagenstecher prefers combining the massage with the use of oxide of mercury ointment, but claims very satisfactory results from the massage alone.

The interest now taken in ophthalmology is quite remarkable. An International Ophthalmological Association, which meets every four years, was established about twelve years ago, and many vigorous local societies are now in operation. The American Ophthalmological Society numbers over 75 active members, and quite a large volume of transactions is published annually. There are now over one dozen journals devoted either exclusively or very specially to the advancement of this department of medical science. But, as we sometimes say, "It never rains but it pours." During the past 12 months four treatises on diseases of the eye were issued by the American press alone—one written by Dr. Noyes, of New York, one by Dr. Williams, of Boston, one by Dr. Schell, of Philadelphia, and one by Dr. Mittendorf, of New York.

OVARIAN DISEASE—OVARIOTOMY—RECOVERY.

BY R. JOHNSON, M.D., CHARLOTTETOWN, P.E.I.

May 10, 1881.—Miss V., aged 17, consulted me with reference to an enlargement of the abdomen, which was first observed by her in June, 1880, and had been since then steadily increasing. Her health had begun to fail in June, 1879, and menstruation was not regular from August to December of that year. Under treatment the menses had regularly reappeared from January to June, 1880, and since then have been altogether absent.

The abdomen now presents a full rounded outline, with thin walls, and distinct fluctuation gives evidence of a large collection of fluid. The measurements are, at umbilicus 36 in., from pubes to ensiform cartilage 14 in., and from anterior superior spinous process of each side to umbilicus 8 in. General nutrition of body tolerably good; complexion clear, cheeks somewhat sunken. Thoracic and abdominal viscera performing healthy functions; uterus normal as to size, position and mobility.

May 12.—In consultation with Dr. E. MacNeill, her former attendant, exploration was made with a No. 2 aspirating needle, and having obtained a free flow of straw-colored fluid the aspiration was continued until 10½ lbs. were drawn off. The fluid completely coagulated on test of boiling. After its removal from the abdomen we readily detected a large solid tumor of irregular outline, and freely moveable in every direction. Two days afterwards the patient returned to her home some 14 miles from the city, greatly relieved.

July 15.—Patient returned to town for further treatment. The enlargement of the abdomen has returned, and there is some œdema of the left leg. General appearance about the same, and actual measurements exactly as on May 10. No return of menses. She and her friends were now made fully aware of what was judged to be the nature of her complaint, and of the possible and probable result with reference respectively to the palliative and radical treatment. After a few days deliberation she determined to undergo the radical operation.

August 2.—I operated under ether, at the Charlottetown Hospital, assisted by Drs. Hobkirk, Beer, MacLeod, Blanchard, and Conroy. The primary incision of about five inches, was necessarily made to extend, during operation, to about twice that length. Free bleeding required that two arteries should be tied before opening the peritoneum, which being done, the wall of the sac came clearly to view. Parietal adhesions were found to be extensive, but not difficult of separation. Three gallons of fluid were drawn off from one cyst, with a Spencer Wells' trocar, before withdrawing which, stout whipcord was tied around the sac, in order to assist in the further handling of the tumor. A large piece of adherent omentum was found to hold it down, and, inasmuch as it

could not be peeled off, it was ligatured and amputated. The tumor, weighing about seven pounds, was then readily drawn out from the cavity. The pedicle which was of the left ovary, was about four inches in length, broad and vascular. It was ligatured in two halves, and amputated at about two inches from its base. One of the ligatures included the Fallopian tube. Tinct. Ferri. Perchlor was applied with a glass stopper to the stump, which was held to view until dry. The ligature was then cut close and dropped. Ample time was then occupied in sponging out the cavity with warm carbolic water, until it was ascertained that all oozing had ceased, and that it was thoroughly cleansed. The abdominal incision was entirely closed with deep harelip sutures, superficial silk sutures being also inserted midway between the pins. The dressing consisted of a strip of lint soaked in carbolized oil, and laid along the line of the incision, crossed by long strips of adhesive plaster, covered with an eight-fold sheet of carbolized muslin, a deep layer of cotton wadding, and a double bandage of stout unbleached cotton. Patient was removed to her bed within an hour from her being placed upon the table. Carbolic spray was used for some minutes at the commencement and conclusion of the operation, and shut off for the most part during the intermediate stages. All ligatures were of carbolized silk, and were cut short,

Mild and good reaction was established within two hours after operation, vomiting having occurred but two or three times. During the first forty-eight hours she took nothing but sips of oatmeal water and sucked ice. No solids whatever were allowed until the eighth day. Opiate enemata, (consisting of from 20 to 40 minims of Tr. opii in an ounce or two of water or beef-tea, with occasional addition of brandy) were regularly administered from four to eight hours apart during the first three days, and again on the tenth and eleventh days. This, with brandy in milk, and a few doses of quinine combined with aromatic sulphuric acid met all the indications for medication. The urine was drawn off for a fortnight, at intervals of from four to eight hours, its quantity and quality always appearing with noticeable regularity and of normal standard. The first movement of bowels occurred on the ninth day, soon after an eight-grain dose of quinine. The wound healed

by first intention, some of the sutures being removed on the fourth, and the remainder on the seventh day. Indeed my notes indicate that everything went on to uninterrupted recovery with the exception of a sudden attack of sharp pain with tenderness on pressure in the left iliac region, the pain shooting down the left leg, and accompanied by a rapid rise of pulse and temperature, which occurred on the tenth day, and continued for 24 hours. Of 45 observations taken at regular intervals during 14 days, the highest pulse noted was 110, and the highest temperature $102\frac{3}{4}^{\circ}$ F., which occurred on the tenth day. The patient was discharged, well, on the 21st day, having been able to move about with ease and comfort four or five days previously.

Oct. 23.—Reports enjoying excellent health, and having gained much flesh. Nov. 2.—Health robust, catamenia restored. Nov. 18th, 1882.—Enjoying perfect vigorous health, which has been unbroken since last report of Nov. 2, 1881.

The tumor, examined after operation, exhibited a composite character, and presented in combination the features of what are usually recognized and described distinctively as the histoid, and cysto-sarcomatous varieties. Innumerable loculi, from the size of a bean to that of a small orange, contained, variously, mucous, colloid, oily, purulent fluids—firm sebaceous matter—a tooth, of the shape of a lateral upper incisor—tufts of fine flaxen hair—and ramifying the mass was a shapeless framework of dense white cartilage.

CLOSURE OF THE JAWS FROM AN OLD CICATRIX—ESMARCH'S OPERATION.

BY A. B. ATHERTON, M.D., L.R.C.P. & S., EDIN., FREDERICTON, N.B.

E. M., female, æt. about 35. When eight years of age had measles, for which she was treated by a physician in the country. I could not learn whether or not he gave her any mercury. Subsequently a swelling appeared on the left cheek, which resulted in an ulcerated opening in the soft parts, through which the end of the thumb might enter. Gradually the jaws were drawn together till for the last 15 years, as her mother states, she "has never seen her tongue." The patient was first seen by me about the year 1872, and at that time

the teeth were beginning to be so firmly forced together that the incisors were nearly horizontal, and some of the bicuspid and molars were loosened and removed. The opening in the cheek was plugged every day with a piece of cotton wool to hide the deformity, while she fed herself with fluids through the mouth, sucking the food through an aperture left by absent back teeth.

An operation was talked of then for her relief, but no action was taken till the 1st of March, 1877. At this date it was rendered imperative by the fact that pieces of tartar or loosened molars had fallen inwards several times, and the patient had been once or twice on the verge of strangling by being forced to swallow them. Chloroform being given, with the assistance of Drs. Coburn and Ellis, of Fredericton, and Dr. Holden, of St. John, who happened to be here on a visit, the following operation was done:—The sides of the opening in the cheek were cut into, and the surrounding adherent soft parts separated from the jaws, so as to admit of coaptation of the raw edges; then, several teeth were removed which were in the way, and by means of a chain-saw a piece of the lower jaw just in front of the left masseter, about three-fourths of an inch or more on its upper surface, and one-half inch on its lower, removed. The chain of the saw was passed around the jaw by means of a small blunt hook being forced through the soft parts between the jaw and skin of the cheek, and thereby catching hold of the chain and drawing it up and out after it. In this way only a very slight punctured wound was made by the large needle of the chain-saw which was run through the skin so as to bring the end of the chain within reach of the hook above-mentioned. A great deal of difficulty and danger arose during this part of the operation, from a large mass of tartar, which completely filled up the cavity between the tongue and the lower jaw in front, and to the left side. The mass was nearly spherical and about the size of a walnut. Its surface was irregular, and its irregularity was apparently due to the creases and depressions in the neighboring soft parts, by means of which it was quite firmly attached to them; and when separated, considerable bleeding followed from these parts. The wound in the skin was now fairly well approximated by silver sutures, and carbolized oil dressing was applied, directions being left that the mouth be frequently washed out with

carbolized water. This treatment was pursued throughout.

The patient did very well after the operation, the edges of the opening in the cheek uniting by first intention, and the bone healing after throwing off one or two small bits of necrosed tissue. In three or four weeks she could chew fairly well, and could open the jaws nearly an inch. Very little scar was left, and to this undoubtedly as well as to the improved condition of her jaws, may be attributed the fact, that in a year or so she was married to a young man about her own age, and has contributed more than once towards the population of the Dominion. The jaws at present have come together somewhat, owing to adhesions of the false joint, so that she can open them only about half an inch, but she expresses herself well satisfied with their condition.

Correspondence.

RÖTHELN OR GERMAN MEASLES.

"Quot homines, tot sententiæ."

To the Editor of THE CANADA LANCET.

SIR,—In reply to Dr. Skirving, *re* "Rôtheln or German Measles," I beg to say that my only authority for using the term *German Measles*, is Prof. Da Costa who in his work on "Diagnosis" says that Rôtheln is "*often spoken of as German Measles*." However, as this distinct eruptive fever is likely to be re-christened as "*Rubella*," we will not argue about its name. Judging from the cases I have seen, I believe this fever to be entirely distinct from both measles and scarlet fever. Nevertheless, I do not intend to question the right of any medical gentleman to hold the belief, that Rôtheln is a "*hybrid*," if he so chooses. During the epidemic here, not a single case of either measles or scarlet fever occurred in my practice, nor for several months before, nor for several after. Besides, in numerous instances, I had previously attended the same children during well-marked measles, and subsequently during well marked attacks of scarlet fever.

Referring to Rôtheln, Wunderlich says, "The temperature is nearly always sub-febrile (99.5° to 100.4°)—sometimes febrile (101.3° to 102.2°)." The same writer speaking of scarlet fever says,

"the temperature may reach 105.6° or even a higher point. It usually remains *continuously* high during the eruption, and it is thus well distinguished from those affections with which, on account of other symptoms, it is most easily confounded, and more particularly *measles and rōtheln*." The temperature falls rapidly on appearance of eruption in Rōtheln; and in from twelve to twenty-four hours after eruption in measles, but the fever at the outset of the latter may run as high as 105° or 106° Fahr.

In the October number of the *Canada Medical and Surgical Journal* for the year 1880, may be found the following diagnostic points, separating Rōtheln from measles and scarlatina. 1. The temperature rarely rises above 101° to 102°. 2. The eruption generally appears *at once* all over the body. 3. Rōtheln affords no protection against either measles or scarlatina and *vice versa*. 4. Rōtheln propagates itself and never gives rise to either measles or scarlatina. 5. The patches of eruption in Rōtheln are raised above the surrounding skin, especially towards the centre where the color is deeper. 6. The desquamation is in fine branny scales, and commences at the centre of the eruptive patch, gradually extending to the circumference. 7. The patches of eruption are larger and brighter in severe cases than in mild ones. 8. The tongue is more or less dirty at first, then becomes strawberry-like, and finally smooth—(Dr. W. D. Hemming, *Edin. Med. Journal*.) Hoping, that you will forgive me for trespassing on so much of your space,

I remain, yours respectfully,

R. A. ALEXANDER.

Grimsby, Ont., Dec. 5th, 1882.

Selected Articles.

TREATMENT OF DIPHTHERIA.

The following is an extract from a lecture given recently by Morell McKenzie, M.D., London, Eng., in Bellevue Hospital, New York, and reported in the *Medical Record*:—

The first great point in the treatment of this disease is to attend to constitutional measures and then to local treatment. The constitutional treatment is of no less importance than the local. It is necessary to support the patient from the beginning, and stimulants are of the utmost import-

ance. Do not wait until the patient becomes depressed, but give stimulants from the very commencement. This is an exception to all diseases, and you must begin with stimulants at the commencement, and give them in the more solid form, such as brandy diluted with water, or port wine; such as furnish nutriment as well as alcohol. When the patient is beginning to recover, the light wines, especially champagne, are useful; but, in the early stages, port wine with water is one of the most useful you can give. Stimulants must be given during the night as well as during the day in a very large number of cases. I have seen many cases where patients have died through want of having stimulants administered during the night. In young children it is very frequently necessary to awaken the patient and give stimulants. As a general rule, it is bad to wake a patient out of a refreshing sleep to give medicines; but here is an exception, and I would say that if the child sleeps more than four hours, it must be awakened and stimulants and nourishment administered.

We now pass on from the use of stimulants to the use of medicines. Here, again, we meet with a very great variety, but the most useful, perhaps, of all, is the perchloride of iron. In this matter I am entirely in accord with Professor Jacobi, who has found the remedy more useful than any other. Professor Jacobi has laid it down that this medicine should be given in full doses. It is also important to give a per-salt of iron, which can be assimilated with comparative ease, and probably the perchloride is the best you can use, and of it at least a drachm a day, diluted with water, should be administered; fifteen drops, well diluted with water, four times a day. The only time when I have not given the perchloride of iron has been when I have been trying the local effects of some agent that has been employed. Quinine is a very useful medicine. When the temperature is high it has a very great effect in bringing it down nearly or quite to the normal. These are, perhaps, the most important of the constitutional remedies.

All sorts of specifics have been recommended, but I have not had much success with them. Chlorate of potash has been very much praised, both as a constitutional and a local medicine. You may give it, because it cannot, in proper doses, do much harm, and it may do some good. There is one remedy which has been recommended by a gentleman whom I see before me, Dr. Beverley Robinson, and that is copaiba, which has an important effect upon mucous membranes, as possibly some of you may have had occasion to observe. But its effects are not confined to the mucous membrane of the urethra. It also produces a marked effect upon the mucous membrane of the pharynx and larynx, and that of the whole bronchial tract. I have tried Dr. Robinson's re-

commendation, giving the medicine in the form of pearls, which the French make, and which children take very easily, and I have administered them with great success. But I must mention that I have used it in the catarrhal form of diphtheria—the milder cases—where the exudation is not very adhesive. Even in the more serious cases of catarrhal diphtheria, you will find great benefit following the administration of copaiba.

We will next pass to local remedies, and here, again, we have a very wide field. A great many doctors may go through a lifetime and see only a few cases of diphtheria. Some meet with severe epidemics, and others with epidemics mild in character. The consequence is that an immense number of remedies are not only recommended, but the doctors say that they have not lost a case since they began to use such and such remedies. You must look upon such statements with great suspicion, and it is safe to consider that the doctors who have treated so large a number of cases with such uniform success, have, at least, treated a mild type of diphtheria. The local remedies in most common vogue are lime-water and lactic acid. Both of these remedies have one great advantage; they do not do any harm. And here I may say, gentlemen, that it is a great thing, when you are trying a remedy, to use one that does no harm. In early days severe caustics were used, such as hydrochloric acid, nitrate of silver, and, if the patient recovered, it was always thought that event was due to the acid or the silver. But all that has been changed. We now know that if strong caustics are used the effect is almost always to cause extension of the disease. The remedy inflames and irritates, and a false membrane is formed in close contiguity to that which previously existed. When we were suddenly told by German physicians that lactic acid was used with great benefit, and also lime-water, the news was so gratifying that we all used these remedies, which were not injurious or painful to the patient. Both have been found useful. I ought to say here that certain solutions have been said to be useful because of the effect they produce upon the false membrane, causing it to gradually dissolve and disappear in a short time. But, unfortunately, when we have to deal with the living subject we have a totally different condition of things from that which is present in making experiments, and I have found that when using substances locally sufficient to have any effect upon the false membrane, they had an irritating effect on the mucous membrane which I was treating. Hence I returned to the use of such remedies as do not irritate, and have given up those which had a reputation for dissolving false membrane. With regard to lactic acid and lime-water, they do not have much effect upon the false membrane in the test-tube, but they certainly do seem to have considerable effect when

applied to false membrane growing upon mucous membrane. It is very difficult to make accurate observations with regard to the progress of the disease from hour to hour in children; but I have had opportunity to try both remedies upon false membrane inside the lip and upon the tongue, where I could watch the effect. I recollect three cases in which I tried the experiment with lime-water where false membrane was growing upon the inside of the lip. I treated one side with lime-water and left the other to nature, and the side treated rapidly improved, while the other remained stationary. So that I believe lime-water is useful as a local application, and in this respect I differ with my friend, Dr. Jacobi, who believes that both lactic acid and lime-water have been overestimated. I strongly recommend that you should use them in every case.

We now pass on to another class of remedies, which I wish to bring to your notice, namely, those which shut out the air. This class of remedies I have introduced, and they have been employed in England to some extent. I refer to what may be called varnishing the mucous membrane with benzoin, or tolu dissolved in ether, or chloroform, or alcohol, and also used in various mixtures. I found as the result of considerable experiment that tolu dissolved in ether, in the proportion of 1 to 5, made an excellent varnish, and that when applied to the mucous membrane it did not cause pain or inconvenience, was sufficiently strong to hold, and did not require to be repeated. Many of these local remedies have been recommended on the ground that they destroy germs. Just here it occurs to me that I have omitted to speak of carbolic acid and salicylic acid, etc. Carbolic acid is an excellent remedy, and it has the effect, as has been demonstrated, of destroying germs, and if used sufficiently diluted it will do no harm. All this class of remedies have been recommended upon the scientific ground that they destroy germs. The principle upon which I have introduced the remedies which varnish the mucous membrane is, that whatever the poisonous element may be, whether a vegetable growth or some other germ, or something else, this living matter that causes false membrane to be formed, requires the presence of air. Directly you exclude the air you prevent the growth of germs which require air for their existence. As soon as possible, therefore, I apply this varnish over the false membrane; not only over the false membrane, but all around it. It is of itself to a certain extent a germ destroyer, but everything depends upon the coating of varnish being air-tight. Some of my friends, at first, found considerable difficulty in applying it, and I also had the same experience. At first I wiped the surface, to which it was to be applied, with blotting-paper. I carefully applied this absorbing material to different parts of the throat, and then im-

mediately afterward applied this varnish. This plan answers perfectly well when you can do it; but every now and then you will find a patient who will retch a little just after the blotting-paper has touched the surface, and the mucous membrane becomes wet before you can apply the varnish. I then adopted the plan of putting a piece of lint around my finger and drying the throat with this, and then quickly applying the varnish with a brush. This does not hurt the child, and I speak of children, because nine-tenths of our cases occur among children, and it answers perfectly well; but if you should have difficulty with this, I should advise you to apply the varnish all the same. I have had several patients treated entirely by the use of the varnish, without constitutional remedies, and with good results.

I will now say a few words with reference to the use of steam and the use of ice. Both these remedies are useful, but they should be applied in different classes of cases. In the early stages it is very useful to employ ice. It affords the greatest comfort to the patient. Let them have ice, and take as much as possible. Many young children are pleased to have pieces of ice put into their mouths. There is no doubt that it restricts the associated inflammation so often present. In the early stages it is most desirable to use ice, and you can use any amount of it without doing any harm. It is only in exceptional cases, where the patient is very much depressed, and in the very advanced degrees of poisoning, where there is a gangrene, that ice does harm. In many cases it diminishes the violence of the attack.

With reference to steam, it was first recommended, I think, by Mr. Prossor James, of London. After, it was pointed out by Oertel that steam must cure almost every case, and that it was the only remedy of any value at all, because the effect is to separate the false membrane from the mucous membrane. The fact is, that when a certain point in the disease is reached, when the false membrane is beginning to separate, steam is useful. At that time its effect is admirable. In the early stages I do not think it does any good. I think it lowers the vitality of the tissues, and that its effect is most prejudicial; but when the false membrane shows evidences of separating from the mucous membrane its effect is most beneficial. So you need have no fear of clashing heat and cold, for you use ice at first and steam afterward, when the disease has reached a certain stage. One great advantage of steam is that you can use some antiseptic with it, such as carbolic acid, salicylic acid, or any other substance you may choose. I should advise you to use some mild antiseptic at this stage of the disease, because a certain amount of gangrene is usually present.

The question often arises whether or not you will perform tracheotomy. I may say here that

my friend J. Solis Cohen, of Philadelphia, who is with us to-day, has published one of the most complete essays on tracheotomy ever published in the English language. I think the conclusion which may be drawn from his paper is that the operation should be performed at a comparatively early stage. That is the conviction which I have. My advice is that when once there is considerable false membrane in the larynx, when inspiration is so difficult that you see falling in of the sternum each time the patient breathes, and each supra-clavicular space deepened with every inspiration, the time has arrived for tracheotomy. But you will examine the whole of the patient's thorax, and most carefully the posterior part of the chest, to see if air enters both lungs. If you find one lung seriously obstructed, I myself should advise against tracheotomy. If you find that air does not enter the lung beyond the bifurcation of the bronchus, tracheotomy will be useless. Still there are cases in which we have everything to hope if a cure can be effected. But at the same time we should consider the interests of surgery, and when I say the interests of surgery, I mean the interests of the entire public, as well as those of the surgeon. If we perform the operation in a case almost entirely hopeless, we have to consider the effect produced upon the feelings of friends when a similar operation is to be performed in a similar case. The point which I wish to insist upon is, that if you perform tracheotomy, you should do it directly it becomes necessary. You must not wait until the case becomes hopeless. If you do this, you will find that a large number of cases which appear hopeless will terminate in recovery. On the other hand, if you perform tracheotomy too early, you will perform it in a large number of cases which will recover without it. I think the very favorable statistics with regard to the operation, especially those furnished us from Parisian hospitals, are partly the result of the operation being performed where it should not have been performed; that is, in cases of diphtheria. In this manner you can get the most favorable statistics, but it is not a fair procedure to perform tracheotomy before there are distinct signs of laryngeal dyspnoea.

ABORTION.

Clinic by PROF. W. H. TAYLOR, M. D.
(*Cincinnati Hospital.*)

Carrie B—, age 33 years, American, married, resident of Cincinnati 9 years, admitted October 22. The patient has suffered from malaria and rheumatism. She denies specific trouble. She began to menstruate when fifteen years of age and has always been regular but has suffered occasionally from pain after the flow. She has had one living child and a miscarriage in December last.

She missed her menstrual flow seven weeks ago, and one week ago she began to bleed. She has had pain in the back and some bearing down pains. She has been bleeding for a week at present date but does not flow much. There are no clots in the escaping blood. She has been drinking and is rather shaky from its effects, but is steadier this morning than she was last night. She slept well during the past night. Her bowels are constipated and appetite poor.

About one week after the disappearance of her menses she began to be sick at the stomach every morning and this condition continued for a month or more. She took tansy tea to bring on the flow. Upon vaginal examination the os is found patulous, admitting the tip of the finger and the uterus enlarged. It is preceptible above the brim of the pelvis.

Gentlemen:—There are two facts in the history of the case you have just heard read that should at once awaken suspicion as to the true condition of this patient. A married woman, previously regular ceases to menstruate. Following almost immediately upon this cessation of menstruation we have a history of nausea and vomiting, a condition occurring so frequently among pregnant women in the early hours of the day, that it is generally known, both by the profession and laity, by the name of "morning sickness". These two symptoms, taken in connection are strongly suggestive of pregnancy, but they are not diagnostic.

I think the value of this latter symptom has been exaggerated by writers on obstetrics, for it is no uncommon occurrence for women in this hospital, far advanced in pregnancy, to tell us that they have never been at all nauseated during the whole course of gestation. When present this symptom is strongly suggestive of pregnancy, but it is so frequently absent in normal gestation that you can by no means infer that women who do not present this symptom are not pregnant. But where in addition to the symptoms mentioned physical examination shows us that the uterus is enlarged, we are almost certain that pregnancy exists. We can not be absolutely certain for the fetal heart sound is the only absolutely reliable sign of pregnancy and that is not demonstrable until gestation is further advanced than in the case now before us. The question is rendered still more uncertain by the fact that the tumor felt above the pubes may possibly be something else than the enlarged uterus, we may be mistaken in the signs obtained by physical examination. The only way to determine this point positively would be to insert the uterine sound. If we found the cavity of the uterus elongated there could be no further question as to the enlargement of that organ. But it is a cardinal rule in obstetric practice never to use the sound when even a suspicion of preg-

nancy exists. Hence we can only make a relative not a positive diagnosis in this case, but the collection of symptoms is such that we may be morally certain that pregnancy does not exist or has existed.

The patient's history as obtained by the house physician, also tells us that she took tansy tea to bring on her menses. This is a household remedy of little or no potency, but it is not so with the oil of tansy. The latter is a very dangerous drug. A number of cases have been reported recently, where small quantities taken to cause menstrual flow have been attended with fatal results. There is no drug in common use that is at all reliable as an abortifacient. The experience of this hospital proves this conclusively for a majority of the patients admitted to the obstetric wards have made at least one, more often several attempts to interrupt gestation by means of drugs. The fact of their applying for admission, here shows that their confidence in these popular measures for destroying the fœtus has been misplaced.

During the past week, the woman now before us, has suffered from uterine hemorrhage, but as she did not enter the hospital till night before last, we are unable to tell what was expelled from the uterus, but no clots have been passed so far as we are able to ascertain. A prominent French obstetrician has recently published an article, and you will find it now going the rounds of the medical press, in which he says it is possible to distinguish an abortion in the early months of pregnancy from a return of suppressed or delayed menses by presence of clots in the flow caused by an early abortion and their absence in the flow of returning menstruation.

The present case, in addition to many others, which I have seen, convinces me that the distinction is not reliable. In early abortions the fœtus is often too small to attract attention and the blood escaping freely may not coagulate, while the menstrual flow is sometimes mingled with coagula.

In the case now before you, while the flow of blood has never contained clots, we have here the enlarged uterus, and other symptoms that make us morally certain that we have not a return of suppressed menses, but an interruption of pregnancy, an abortion. Another statement recorded in the history of the case as given by the woman herself is worthy of special attention. She says that she was regular until seven weeks ago, but we find on palpation the uterus is perceptible above the pelvic brim. This in itself is conclusive evidence that she is mistaken in the supposed duration of her pregnancy. The uterus sinks in the pelvis in the first months of pregnancy, and only rises above the pubes after the third month. So we have here an abortion to treat, that is occurring in the first three months of gestation, or in the earlier part of the fourth month. Late abortions require an entirely different plan of treatment, but time forbids our

entering at length into the discussion of it this morning.

In the treatment of all abortions, the first question to be determined is whether or not it is possible to prevent the threatened destruction of fœtus and secure the birth of a child at full time. If you believe this possible, rest in bed and large doses of opium are the remedies you should employ. But if the abortion is inevitable the indications for treatment are to empty the uterus as soon as possible.

"There is no safety except in an empty uterus". It is the custom of most physicians to give ergot in these cases for the purpose of arresting hemorrhage, and promoting the expulsion of the fœtal membranes and decidua. This custom I do not approve. Ergot can only arrest hemorrhage by causing contraction of the muscular fibres of the uterus. Now in this early period of utero-gestation, the uterine muscular fibres are so little developed that their action can have little or no effect in controlling the hemorrhage. If ergot should cause contraction of the uterus it would close the os and thus defeat the object for which it is given, so I never use it in treating abortion. The proper treatment is to insert the finger and gently scrape away the membranes and decidua.

If the membranes are unruptured, a very rare occurrence, great care should be taken not to rupture them. The so-called placental forceps should not be used in these cases. While they may be inserted further than the finger, you have no means of knowing whether you have seized a portion of the membranes or some of the proper structures of the uterus and great harm may be done by their employment. Where instrumental interference is demanded use only the dull wire curette. With it you can remove all membranes and decidua and can do no serious harm. The sharp curette, recommended by some prominent writers, is like a knife that will cut away some healthy mucous membranes as readily as fœtal membranes and should not be employed in the uterus already made very susceptible to injury by the intense congestion which pregnancy induces.

But often when a physician is called to see a case, the os is not sufficiently dilated to admit the examining finger. Then your treatment should vary in accordance with the occurrence or non-occurrence of hemorrhage. In the present case where the woman is not flooding much, we are giving her simply the mucilage of Acacia as a placebo and waiting for nature to effect a cure. Should there be much bleeding more active treatment must be instituted.

Most text books recommend the vaginal tampon for these cases. But in early abortions it is better to plug the os uteri. Bear in mind the distinction, that it is only in case occurring in the early months of pregnancy, that this method is applicable. Late

in pregnancy, there is only one circumstance that should justify the insertion of a plug into the os uteri. But in the early months it can be resorted to without danger. The cavity of the uterus is so small that it can contain at most only three or four ounces of blood and its walls are so firm that it can not be distended. Cotton, a roller bandage, twisted into the shape of a cone or sponge tent may be used as a plug. This plug by absorbing the blood, expands, and thus dilates the os, a condition we very much desire to obtain. The plug must not be allowed to remain in situ more than twenty-four hours, and it would be better to remove it in twelve. In this time it becomes very offensive from decomposition of the retained secretions, and if allowed to remain longer, would favor the development of septicæmia, the condition most to be feared in abortions. For this reason also, it is important to remove all of the decidua as soon as the os is sufficiently dilated by the plug. There is no placenta at three months, although writers in the journals often speak of the placenta in the early weeks of pregnancy. The prognosis in this case is favorable. But professional experience does not bear out the popular impression that there is little or no danger to the woman in an abortion. Probably one in ten die from its effects.—*Cincinnati Lancet and Clinic*.

LISTERISM, ITS USES AND LIMITATIONS.

BY W. M. STOKES, F.R.C.S.I.

The following is from the address in surgery read before the British Medical Association, August, 1882:—Considering that the treatment of wounds is, in Professor Humphrey's words, not merely "the first stone, but also the corner stone of surgery," antiseptic practice should rank, in my opinion, as the greatest of the surgical advances that the past half century has witnessed. It deserves a special attention, not merely on account of the results of its adoption, but also because surgical opinion is still so divided about it—an unsettlement to which an impulse has been given by Mr. Savory's remarkable address at Cork, and by the observations on the value of carbolic spray made by Mr. Lister himself at the International Medical Congress last year. As regards Mr. Savory's denunciation of Listerism, I would say that, after reading it, and also the able reply to it by my colleague, Dr. Thompson, one can not but come to the conclusion that, when the address is stripped of all its brilliant eloquence and rhetorical decoration, two facts are, to our surprise, brought clearly to light. One is the admission of the germ-theory of putrefaction; and the other, that the method of dressing employed by Mr. Savory is es-

essentially antiseptic, consisting as it does of many of the features that characterize Listerian dressings—for example, carbolyzed catgut ligatures, carbolyzed oils, drainage, and washing the wound with a weak permanganate of potash lotion, or “some other potent antiseptic.” Now, as the author of the reply to which I have referred, properly asks, “Is this method fittingly characterized by its simplicity and the entire absence of all novelty?”

In reference to Mr. Lister's statement on the value of carbolic spray, about which there has been so much unfortunate misconstruction and misunderstanding, I would certainly say he did not surrender his position in any way. He did not, as was said to me in terms more picturesque than accurate, by an eminent surgical friend on that occasion, “Inter antiseptic surgery and sing a dirge over it.” On the contrary, he stated that he looked forward to obtaining a more perfect and convenient mode of asepticism than that afforded by carbolic spray.

Considering the subject from a purely practical point of view, it appears of very little consequence whether we accept the views recently discussed by Dr. Burdon Sanderson, or those of Ogston and Hueter, the former maintaining that the inflammatory exudates of a wound do not depend primarily on the contact with them of atmospheric organisms, but that their secondarily infective character does; in other words, that atmospheric organisms *per se* are not necessarily a source of danger, nor do they predispose to the formation of inflammatory exudates, but they do exercise a baneful influence on the latter by rendering them infective. To quote his words, “they are not so much mischief-makers as mischief-spreaders.” Two distinct functions are attributed by Burdon Sanderson to these organisms; one “of developing what may be called the phlogogenic infection, and that of conveying it to all parts of the body.” Ogston and Hueter, on the other hand, maintain, and furnish strong arguments for their views, that septic organisms are primarily the sources of all the inflammatory troubles to which wounds are liable, and that under aseptic conditions these dangers can be avoided.

The essentially weak point in the persistent and obstinate opposition to Listerism is the almost universal admission of the truth of the germ-theory of putrefaction. If the fantastic theory of heterogenesis had not long since been swept into the deserved limbo of other exploded doctrines, there would be some scientific standpoint for those opposed to Lister's theory and practice. But not having this, and admitting the truth of the germ-theory of putrefaction, they surrender their position. An attempt has been made by Mr. Lawson Tait to draw a distinction between the effects of germs on dead and living tissues, the only serious consequences being, it is alleged, those which result from their introduction into the system through

the medium of dead tissue. Such is the contention. In a word, it comes simply to this—that if the dead tissue factor were non-existent, the organisms would remain harmless; if, on the other hand, it be present, they become hurtful. But those who hold this view ignore the elementary fact that there never was a wound, and especially one in which vessels are tied or twisted, in which dead and living tissues were not at once brought into contact. Assuming, however, that this was not the case, has it not been shown on clear evidence by Dr. Burdon Sanderson that septic agencies generated in the organism may induce idiopathic inflammation without the medium of dead tissue? Also that, in acute peritonitis, septic organism can, through the medium of the lymphatic vessels, be conveyed into the blood streams, and, to use his words, “carry with them a phlogogenic virus, by virtue of which, wherever they lodge, they become the starting points of infective abscesses.” Again, that singular phenomena are observed in connection with ulcerative endocarditis, confirming the observations of Weigert that, in variola they find their way “in myriads” into the circulation, and eventually find a resting-place in the capillaries of the internal organs, where they become nuclei of infective abscesses.

Those who advocate and practice what they are pleased to term a “modified” antiseptic system, attempt, in fact, in a roundabout, clumsy, inefficient way, to do precisely what those who practice Listerism achieve by means which are the outcome of accurate scientific research.

It has been stated that ovariectomy should be considered the touchstone of the efficacy of the antiseptic treatment of wounds. I do not think so (although my successes in ovariectomy date from the time I adopted the system), and for the reasons given by Prof. Lister. First, the disposition of a large serous membrane to absorb rapidly the plasma from the cut surface, the absence of tension, the high vital power of the peritoneum in uniting after being wounded; and, lastly, that bloody serum is an unfavorable medium for the growth of micro-organisms, a fact directly at variance with the dictum of Keith, that it is the “enemy of the ovariectomist.” One of the best tests, if not the best, for the value of antiseptic practice, is resection of the knee-joint, as there are so many circumstances that militate against immediate union being maintained after it. In the first place, the cases requiring so formidable an operation are, as a rule, in a condition of great physical exhaustion consequent on long confinement, and probably protracted suffering of mind and body. The wound is of necessity a large one; the operation occupies a considerable time; two large freshly-cut bone surfaces are made, between which union is to take place; and, lastly, there is the great difficulty of keeping, no matter what ap-

pliance be adopted, the limb absolutely at rest during the process of union. Before the adoption of Listerism the surgeon anticipated that four, six, or eight months or longer, would elapse before union took place, and it was always a subject discussed at consultations on these cases, previously to operation, whether the patient would have strength to endure so protracted a suppuration. As an illustration of how changed matters are now, in a series of fourteen of my cases of excision of the knee-joint, the wounds in nine of them united without a trace of pus production; and in the last of them only two dressings were required subsequent to the one applied at the time of the operation, and in seven weeks after, the patient was up and going about. Another antiseptic triumph was the case of a boy with extensive necrosis of fibula, sinuses, and suppuration existing at the time of the operation. I excised subperiosteally the diaphysis of the fibula, and the case pursued a perfectly aseptic course, the evidence of new bone-formation being also incontrovertible.

From the fact of there being no pus-production subsequent to the operation, notwithstanding the pre-existence of suppurating sinuses, a special interest attaches itself to this case. I can only account for this exceptional circumstance as a result of the careful washing of the sinuses by carbolic acid and zinc chloride solutions.

As regards the hygienic effects of the practice, I may mention some facts of interest noticed by me and my colleagues in the hospital to which I am attached. The building is a very old one, and was not constructed originally for an hospital. None of the more modern arrangements, now considered so essential, as regards heating, light, ventilation, etc., exist. It is situated in a poor, very densely-populated part of the city, with tenement-houses, dairy yards, cattle-sheds, and stables in the neighbourhood; and some of the houses in its immediate vicinity have been designated by the medical officers of health as "fever nests." When I was a student there, erysipelas and pyemia were not unfrequently observed after operations even of no great magnitude; hospital gangrene, too, I have seen several instances of—in fact, these three diseases constituted a grim trio of which the surgeons had not unnaturally a dread. Let it not be thought that the occurrence of these was in any way to be attributed to want of care and attention to cleanliness. No cases could in this respect be more conscientiously or carefully managed. What now exists? Hospital gangrene is an extinct disease; nor have we observed, during a period extending over six years, a single case of erysipelas, septicæmia, or pyemia following an operation in which the practice of Lister was accurately carried out; *accurately*, for everything depends on that. The practice has been well compared to a coat of mail, which secures the wearer so long as it is perfect,

but any missing link in which may admit the *lethalis arundo*.

Similar testimony to what I and my colleagues can state, has been given by many foreign surgeons of eminence, among whom I may mention Von Nussbaum, Bardeleben, Thiersch, Von Langenbeck, Volkmann, Esmarch, Saxtorpf, Champagniere, and many others.

Although I do not regard surgical statistics with the reverential awe that some do, who look upon them in fact, as a sort of tribunal beyond which there can be no appeal, I observe that in a record of upward of six hundred operations performed by myself and my colleagues at the Richmond Surgical Hospital, during the past three years—an institution which I have already spoken of as being hygienically in so unsatisfactory a condition—the mortality was 36 per cent.; and there was not a single case in which Listerism was accurately employed that was followed by any infective disease. —*Med. Press and Circular*.

A NEW METHOD OF REDUCING DISLOCATIONS OF THE HUMERUS AND FEMUR.

BY JAMES E. KELLY, F.R.C.S.I.

I shall confine my remarks to luxations of the humerus, and mention the circumstances under which I was fortunate enough to discover my method of reduction. Late one night a sailor, æt. 40, was admitted with subcoracoid dislocation. Was of remarkably muscular development, and a highly nervous temperament. After trying unsuccessfully some of the ordinary modes of reduction, I thought of controlling his resistance by chloroform, but I discovered such extensive valvular disease that I hesitated to produce anæsthesia. As patient suffered great pain, and was clamorous for speedy relief, I repeated my efforts, and exhausted every means of reduction with which I was conversant; until in a mental condition, intermediate between desperation and a vague sense of the utility of the measure, I turned my back toward the patient, who was on a mattress, and, lying across him, I drew my arm round his pelvis, and giving my body a sudden turn, or version, I was delighted by the agreeable sound and sensation which indicate reduction of a dislocation. The striking success of this expedient produced in my mind a train of thought which resulted in the elaboration of the method which I recommend, with a confidence based upon the extensive experience of over twenty successful cases, with but one failure.

For my operation, the selection of a couch or bed is of importance. It should be firmly fixed, and hard, and, when a choice is practicable, I pre-

fer it, for the subglenoid dislocation, to be about three inches lower than the great trochanter of the operator, whilst one lower still by a few inches, for the anterior dislocations, and a little higher for the posterior, allows the force to be applied advantageously in the direction of the glenoid cavity. Patient should be placed as close as possible to the edge of the couch, on his back, with his head low. In order to make the description of the procedure intelligible, I shall divide the operation into two stages. In the first, or preparatory stage, the operator places the injured arm at right angles to the body, and standing against it with his side to the patient and his hip pressed firmly, but not roughly, into the axilla, he folds the arm and hand of the patient closely round his pelvis, and fixes the hand firmly by pressing it against the crest of his ilium. The second stage during which the reduction is effected, is very simple, consisting merely of a rotation, or version of the surgeon's body into the position represented in the figure, with a force and rapidity which necessarily vary with the peculiarity of the dislocation—some yielding most rapidly to a sudden and powerful effort, and others to gentle and gradually increasing traction.



In reviewing this manœuvre I shall briefly contrast the substitutes which it affords with the recognized methods of making extension, counter-extension and coaptation. In the application of extension, instead of the grasp of the operator, which is often insufficient, the clove-hitch or other knot, the special bracelets, combined with flexion of the fore arm, bandages, chamois or adhesive plaster, I propose the simple folding of the arm, fore-arm and hand round the pelvis, which, forming a series of angles, distributes the resistance, so as to enable the operator, with one hand, to afford sufficient fixity for the application of the powerful extending force. For the limited strength of the

operator, the uncertain and mutually obstructive force derived from numerous assistants, or the dangerous and sometimes disastrous mechanical extension by pulleys or adjusters, I would substitute a perfectly controllable and easily sustained power of some hundreds of pounds, derived from nearly all the muscles of the trunk and of the upper and the lower extremities. Again, for counter-extension, which must have been a matter of great difficulty, when such means were necessary, as the split-sheet, the fixation-table, the albi, or the special belts, the numerous assistants, the suspension of a patient over a door, through a ladder, or from a ceiling, I suggest the weight of a patient's body and the resistance afforded by its traction or friction over the rough surface of the couch. For coaptation, in lieu of the various fulcra, such as the heel, the knee, or the bed post, as well as the special balls, the jack-towels, etc., I supply one which is safe and sufficient—safe, inasmuch as the well-padded gluteal region is unlikely to produce such injuries as laceration of the axillary vessels or fracture of the ribs; and efficient because, in the torsion of the body, the hip materially assists by forcing the head of the humerus towards the glenoid cavity, and by its volume it makes the extension tend to the desirable angle of 45° , which places the deltoid and supra-spinous muscles in the most favorable condition. For any additional "manipulation," the surgeon has the hand next the patient's axilla disengaged for such manœuvres as lifting the head of the humerus into its cavity, making traction upon it forwards or pressure backwards, according to the nature of the dislocation. The fixation of the scapula, a point of considerable importance, is secured by its position between the couch and the body of the patient, while its inferior angle is supported by the gluteal region of the operator.

One of the great advantages of this operation is the ease with which a surgeon can reduce almost any dislocation without assistance or the appearance of violent exertion; but should a case of peculiar difficulty present itself, additional extension may be applied by one or more assistants making mediate or immediate traction on the patient's arm; and the counter-extension is as readily increased by pressure on his uninjured shoulder or his pelvis. The importance of being able to dispense with anæsthesia in operations is indisputable, especially when the surgeon is summoned suddenly, and without assistance, as so frequently occurs in dislocations. My colleagues have informed me of seven dislocations occurring, and reduced by my method.

For posterior dislocations of the femur.—The patient is laid prostrate upon the floor. Three strong screw-hooks are inserted into the flooring close to the perineum and each ilium of the patient, and to these hooks he is secured by strong bandages or

rope. The injured thigh is flexed at right angles to the patient's body: the foot and lower extremity of the tibia are placed against the perineum of the surgeon, who, bending forward, with the knee slightly flexed, passes his forearms behind the patient's knee and grasps his own elbows. Reduction is now accomplished by drawing the femur upwards; but circumduction may also be practised; the surgeon, stepping backward, then extends the limb, and lays it by the side of its fellow. In sciatic dislocations, in order to liberate the head of the bone from the foramen, a bandage may be passed around the thigh, close to the trochanter, by which an assistant may make traction.

For anterior dislocations.—The patient is placed upon a table of such elevation as to have his pelvis nearly as high as the trochanter of the surgeon. A bandage around the pelvis, and secured to the side of the table farthest from the dislocation, affords counter-extension. The surgeon, with his face directed towards the dislocated joint, and standing on its inner side, with his trochanter pressed against the femur, now bends the leg behind his back, and grasps the ankle with the corresponding hand. Reduction is effected by rotating or turning his body partially away from the patient, thus making traction on the femur in the most favorable direction, and at the same time pressing its head towards the acetabulum with the disengaged hand.—*Dublin Jour. Med. Sci.*, Sept.

ECZEMA OF THE ANAL AND GENITAL REGIONS.

A very common accompaniment of eczema of these regions is a greater or less congestion of the portal and hæmorrhoidal circulation, manifested by a purplish congestion of the mucous membrane of the anus, or very commonly by a greater or less degree of internal or external piles. These latter may not be sufficient to be recognized by the patient, and yet be an element indicative of the existing state which must be regarded.

When this state exists, the well-known mixture of precipitated sulphur and cream of tartar should be given in sufficient quantity to secure one or two loose movements from the bowels daily. It should not be given with syrup, as this often ferments in the stomach, or acts injuriously in some other manner. The mixture should be equal parts of sulphur and bitartrate of potash, and the dose is one or two teaspoonfuls rubbed up with water into a paste, to be taken at night on retiring.

When there is no marked hæmorrhoidal congestion, use a pill of two grains and a-half each of blue mass and compound extract of colocynth with a quarter of a grain of powdered ipecac in each pill—two to be taken at night and two on the second night after, followed each morning by a Seidlitz

powder or Kissingen water. These pills should not be used at less intervals than a week or two.

If there is simply a sluggish action of the bowels, a pill may be used composed of one-half grain of extract aloë. Soc., with one grain of dried sulphate of iron and a little aromatic powder and confection of roses, one pill after eating. Much may be attained in the way of overcoming the constipated habit if these pills are used as follows: At first, one pill is given directly after each meal; in a few days the noon pill is omitted, and a few days after the morning pill also, and later the evening pill is required less frequently and finally omitted. They must be used until a daily action from the bowels is acquired. As a rule, it is unwise to give cathartic mineral waters to these patients, because these waters constantly stimulate the intestinal tract by too energetic action.

Next to imperfect bowel excretion, deficient kidney excretion is an element to be regarded. The urine of these patients is seldom that of health. Frequent micturition is not at all uncommon. Most of these cases require an alkali, and the acetate of potash seems to be indicated with a bitter, as—

R. Potass. acet..... ʒj.
Tinct. nucis vom ʒij.
Infus. quassie ʒvi.

M.—S: Teaspoonful in water after eating.

This alkaline course may be continued during the entire treatment, and frequently for some time after the complete disappearance of the itching and eruption.

Not infrequently cases of eczema of the anus and genitals will be associated with oxaluria, and will be quickest relieved by strong nitric acid internally in doses of gr. ij after eating, largely diluted. [The well-known Mettauer's acid—equal parts of nitric and muriatic acid and water; dose, gr. iij–vii, in water, is often much more efficacious in these cases.—ED.]

The mixture of magnesia sulphate, sulphate of iron, sulphuric acid, and infusion of orange peel is of much service when there is a tendency to sluggishness of the bowels, which is not corrected by diet, etc., after a course of the pills mentioned.

The disease may be due to simple debility, in which case iron and other tonics are indicated.

Arsenic may be given as a modifier of the nutrition of the skin, but never as a curative agent or as a controller of congestion or inflammatory action.

Local measures are of as great importance as internal remedies in these cases. The soothing plan should be followed as far as possible. Hot water is a valuable remedy in relieving the congestion of the parts and the consequent itching, but it should be hot, not simply warm. The patient should sit on the edge of a chair and have a basin with very

hot water and a handkerchief in it. The latter is taken up and held in a mass to the an is or genital parts, as hot as can be borne, say for a minute, and then dipped in the water again, and the process repeated three times, the whole lasting not more than two or three minutes. Before the hot water is gotten ready, the ointment to be applied should be spread thickly on the woolly side of surgeon's lint, cut to fit the affected parts only, and put by for immediate use. After using the hot water, the parts are rapidly dried with a large, soft napkin *pressed* upon them, with *no* friction, and the ointment applied as quickly as possible, so as to exclude the air.

Ordinarily the hot water is to be used only at bed time, and the patient must not scratch the parts. But the hot water may be used more frequently if the itching recurs—though the ointment may be repeated once or twice during the day without the hot water. The ointment should never be rubbed in, but always spread on lint, and the fresh cloth should be ready to put on as soon as the other one is removed, in order to prevent access of air. Various ointments are used. A good one is—

R. Unguent. picis..... $\mathfrak{z}\text{ij}$.
Zinci oxid $\mathfrak{z}\text{ij}$.
Ung. aquæ rosæ (U. S. P.)..... $\mathfrak{z}\text{iiij}$.—M

This should be of consistence to spread easily and remain soft. Vaseline and cosmoline should not be used, as they rapidly soak in and leave the parts dry and exposed.

Another very effective ointment is—

R. Unguent. picis. $\mathfrak{z}\text{iiij}$.
Unguent. bellad..... $\mathfrak{z}\text{ij}$.
Tinct. acon. rad..... $\mathfrak{z}\text{ss}$.
Zinci. oxid $\mathfrak{z}\text{ij}$.
Ung. aquæ rosæ $\mathfrak{z}\text{iiij}$.—M.

The ointment of chloral $\mathfrak{z}\text{ij}$, and camphor, $\mathfrak{z}\text{j}$ to the $\mathfrak{z}\text{j}$, is an efficient antipruritic.

Lotions are often of service, especially in eczema of the penis and scrotum, and the following can be recommended:

R. Bismuth subnit..... $\mathfrak{z}\text{ij}$.
Acid hydrocyan. dil..... $\mathfrak{z}\text{ij}$.
Emuls. amygdal..... $\mathfrak{z}\text{iv}$.—M.

This must not be used if the skin is much torn or broken.

When the congestion has ceased, and there is still some thickening and a tendency to slight fissures in the skin, the green soap, compound tincture of green soap may be used—

R. Saponis viridis
Olei cadini.....
Alcohol..... $\text{aa } \mathfrak{z}\text{j}$.—M.

With this we need friction; and a piece of muslin or flannel is wet with the lotion and rubbed briskly over the parts for a few moments, and then it is

well to use a mild ointment. For this the ordinary zinc ointment answers very well, or subnitrate of bismuth or calomel $\mathfrak{z}\text{ss}$ to $\mathfrak{z}\text{j}$ of unguentum aquæ rosæ. If a tendency to slight fissures of the skin still remains, we may touch the parts very carefully with the silver stick, and afterwards packing in a little cotton upon the parts. This must be used with caution.

Eczema of the female genitals presents some features still different from those in men, and is often very rebellious, but is, in the main, entirely amenable to very carefully directed treatment on the plan here detailed—and that in a reasonably short time.—*L. D. Bulkley in N. Y. Med. Record.*

DIASTASIS OF THE HEAD OF THE FEMUR IN A CHILD.

Clinic by PROF. L. A. SAYRE, NEW YORK.

This case was that of a little girl eight years of age, sent on account of supposed hip-disease.

The father stated that she had always been lame, and that her left leg had always been shorter than the right. On examining her with great care no disease whatever of the hip-joint was found. The legs were parallel, and the shortened limb could be drawn to an even length. The leg could be flexed in every possible direction, but when the two were placed together the left leg was one and a half inches shorter than the other, and it lay perfectly parallel with the opposite limb; the foot was parallel also. If this had been the result of dislocation upon the dorsum of the ilium, the foot would be turned in; if it had gone on to the third stage of hip-disease, it would result in shortening of the head from absorption and enlargement of the acetabulum from carious degeneration, the foot would also be turned in and at the same time ankylosed more or less completely, and we would have that distortion or inversion and crossing of the limb peculiar to the third stage of hip-disease.

Standing the little child so as to expose her back, she had the appearance of lateral curvature, because the left leg was shorter and she was compelled to twist the pelvis to place the left foot on the ground. The lateral curvature depended, of course, entirely upon the shortened leg. The trochanter major on the left side was "clear up" near to the crest of the ilium, as was shown by Nélaton's test. The latter was given as follows: We pass a string from the tuberosity of the ischium around the thigh posteriorly to the anterior superior spinous process of the ilium, and if the femur is normal, the head in its acetabulum, that line ought to pass directly over the top of the trochanter major. That is called "Nélaton's test."

The trochanter was one and a half inch above that line. When the neck of the femur is broken the trochanter also rises above that line.

The case was diagnosticated not as one of diseased hip joint but of diastasis. Nature had made an artificial joint, but not having any buttress, allowed the femur to glide upon the ilium, and had made the child lame and greatly deformed.

Dr. Sayre had made an instrument for bringing the limb down and retaining it there, so that nature might create a new joint in as favorable a position as possible.

In this connection allusion was made to a child brought to him when six years of age, in which he found there was no disease of the hip, but there had been a fracture of the neck of the femur. The leg was flexed nearly at right angles and quite firmly ankylosed. He broke up the adhesions, divided the tendons, and brought the limb to a natural position; then putting on a long splint, the leg was kept in that position until it formed an eburnated condition of the bone, and the head of the femur became rounded to fit this place, and made a perfectly good movable joint. The child ran around for some three years or more with simply a shortened limb, dying eight years after from a double pneumonia, and he obtained the ilium showing the acetabulum nearly obliterated. Previous to death, for two or three years the child could walk without any artificial aid whatever, with the exception of a high-heeled shoe to equalize the length of the limbs.

In describing the treatment, Dr. Sayre continued: Now, this is what I propose to do with this child. I intend to pull the limb out. Now, if I can keep it in that place and allow her to make free motion, it will thus give Nature a better opportunity for forming a new joint than if left to be pressed up on the dorsum of the ilium.

The instrument is simply a pelvis belt, with two perineal straps. On the outside of the distorted limb a shaft, as you see, runs down which connects with this belt by a moveable joint, and has at the same time a hinge which will either abduct or adduct, there is also a joint at the knee to allow the child to sit down; at the lower part of the shaft is another shaft running into the other, capable of adjustment, this terminates in a small axle running under the shoe, which axle fits into a little box. There is also a band which goes loosely around the knee to assist in retaining the instrument in position. In putting this instrument on, you have the pelvis belt go around just under the crest of ilium, and have the perineal bands buckled on either side, putting some soft rags between the bands and the perineum for a time every night with a little alcohol and alum.

Now the box for the axle being screwed fast to the shoe under the instep, the axle being slipped in and fixed, the pelvis belt fastened, and the perineal

bands buckled, the instrument is screwed out and adjusted by the application of a key. The limb is now extended until the trochanter major has passed nearly an inch below the lower border of the pelvis belt, which it remained against before the extension was applied.

Now, as the child stands up, you will observe that the limbs are of equal length and the lateral curvature has disappeared. The child then walked around with the greatest ease.

This is the first experiment on this child; had the case been diagnosticated earlier there would have been a much better opportunity to get a good result than there will now be.

CONSERVATIVE SURGERY IN CHRONIC DISEASE OF THE ANKLE-JOINT.

The case was a boy who had come to the clinic a year ago with chronic disease of the ankle-joint. The foot was a shapeless mass and intensely painful, with numerous sinuses leading to dead bone, and had been condemned to amputation by three of the surgeons of the hospital. Dr. Sayre was not aware at the time of their conclusion, and determined upon the removal of all diseased bone. The House Surgeon thereupon removed the os calcis, astragalus, cuboid, scaphoid, and cuneiform bones subperiosteally with the periosteum elevator, the os calcis being removed almost in its normal shape; the remaining bones were taken out in small fragments.

The wound was then thoroughly filled with Peruvian balsam, so that all parts were covered from the effects of the air; Listerism carried out to perfection, the creosote in the balsam being the antiseptic. It was then filled with oakum, which kept the heel in shape, a flannel blanket was drawn tightly over the whole foot, and the leg firmly encased in a plaster-of-Paris bandage, the foot being held firmly in the normal position. After the bandage was set a fenestrum was cut through on either side of the foot and a large wad of oakum placed in either fenestrum, a roller bandage was then firmly applied to the whole limb, the plaster casing protecting the limb from pressure over the fenestra, while the internal stuffing being made of picked oakum, percolation could take place and no danger of pyæmia or septicæmia was to be feared.

The oakum was removed every day, the amount reapplied being daily diminished as the cavity became filled with osseous matter, until the amount of oakum applied became merely a thread (movement being given daily to the foot). The sinus was completely closed and an almost perfect foot secured, with the exception that the heel did not project to the normal position, but the motions of the foot upon the leg were almost equivalent to a normal joint, and the child walked with scarcely a perceptible limp. The only defect was in the

inversion of his toes from want of power in the peroneal muscles to evert the foot. The application of a little elastic band from his shoe opposite to the little toe to the outside of the leg, by giving slight elastic force would guide the foot in the proper direction and enable him to walk almost normally.—*Med. Record.*

DILATATION AS A CAUSE OF CARDIAC HÆMIC MURMURS.—Dr. George W. Balfour has been led to adopt the theory of dilatation of the heart, as a cause of all cardiac chlorotic murmurs through the following considerations:

1. *This theory is alone capable of explaining in a rational manner all the discrepancies in the prevalent theories of these murmurs.* The aortic orifice has been most frequently mentioned as the seat of the hæmic murmur. But although it is a basic murmur, it cannot be located at the aortic valve, since at its first appearance it is not propagated along the aorta or into the carotids. Neither can it be at the pulmonary orifice, for though its position of maximum intensity is in the neighborhood of the pulmonary artery, yet there are no causes for a murmur here that are not equally operative at the aortic opening. It has been referred by some writers to the mitral or to the tricuspid valve, but the universally recognized basic position of the primary hæmic murmur excludes this theory. Thus the position of this sound has been referred in turn to each of the four cardiac orifices. The only explanation of such a discrepancy is that the hæmic murmur is one which may be audible in all the positions described.

2. *It is thoroughly consistent with the results obtained by experiment.* When Marshall Hall was investigating the effects of loss of blood upon the system he observed that in the reaction subsequent to such loss the heart's action was "accompanied by a peculiar noise resembling that of the saw or the file." He recognised also the identity of this sound with the chlorotic murmur. Beau determined the fact that the murmurs following loss of blood resulted, not from the primary anæmia, but from the secondary spanæmia, a condition to which he gave the name of "serous polyæmia." He also found that this condition of the blood was invariably associated with a dilated and hypertrophied heart.

3. *This theory is perfectly consonant with clinical experience.* It is known that in chlorosis a similar condition of the heart exists to that found in the "serous polyæmia" produced by repeated blood-lettings—dilatation and hypertrophy. The chlorotic murmurs are not due to anæmia, but to spanæmia, a condition in which the blood is not diminished in amount, though its nutritive and oxygenating properties are greatly lessened. The primary murmur in such cases is the venous hum

depending upon abnormal friction between the spanæmic blood and the venous walls. The next phenomenon observed is an accentuation of the pulmonary blood-pressure, the only possible cause for this being obstruction to the onward flow of blood. This latter, in a disease such as chlorosis, can only be due to a loss of tone and contractile force in the cardiac muscle. Less able to do its work, yet having no less work to do, the heart slowly dilates and at the same time slowly hypertrophies. As the heart dilates, the mitral and tricuspid valves become incompetent and give rise to murmurs. The regurgitation in the tricuspid causes pulsations in the jugular veins, and the abnormally large ventricular blood-waves give rise to systolic murmurs in the pulmonary and aortic areas. These murmurs are propagated along the carotids, and may be heard on the slightest compression in every artery in the body. Thus we have murmurs in every area of the heart in advanced chlorosis. The primary cardiac hæmic murmur is basic, is not propagated in any special direction, but radiates around the pulmonary area. On careful examination its position of maximum intensity is found to be the second interspace, from one to two inches to the left of the sternum. In this position the author states that he has always detected pulsation—at least during expiration. Occasionally this pulsation is so marked as to form a tumor, and has even been mistaken for an aneurism. Now, dulness and pulsation in this region are signs of dilatation of the left auricle; hence the author concludes that this murmur is propagated outward from the dilated appendix of the left auricle. This view receives further confirmation from a comparison of the primary chlorotic murmur with the similar murmur sometimes heard in mitral stenosis, which has been shown by Naunyn to be due to mitral regurgitation. The tense auricular wall is thrown into sonorous vibrations by the impinging blood-streams, the sound being conveyed to the chest-wall by the auricular appendix which lies in contact with it at the base of the heart. Since these two murmurs are similar in character and position, it is fair to assume that they arise under similar conditions.—*British Medical Journal*, August 26, 1882.

PAGET'S DISEASE OF THE NIPPLE.—It is of the utmost importance to come to a definite conclusion with regard to the nature of this disease, whether it is primarily of an eczematous nature ultimately terminating in cancer, or whether it is of a malignant nature from the outset, as the treatment of course, must vary according to the view we adopt. Prof. McCall Anderson has seen a number of cases of this disease and believes that in persons predisposed to cancer, any local irritant may determine an outbreak of the disease at the part irritated; thus we have frequently seen

an undoubted syphilitic disease of the tongue followed by cancer of that part, as the result of the long-continued irritation; and just in the same way it is possible for a simple eczema of the breast to prove the exciting cause of, and to be followed by, cancer of the mammary gland. But if we exclude these exceptional cases, we can arrive at no other opinion than that "Paget's disease of the nipple," is from the first of a malignant nature, and bears a somewhat similar relation to cancer of the breast that the so-called tylosis (or psoriasis) linguæ does to epithelioma of the tongue. Such being the case, it is of the utmost importance to distinguish true eczema of the breast from "Paget's disease of the nipple," towards which the following may be of assistance:

1. "Paget's disease of the nipple" occurs especially in women who have passed the grand climacteric. Eczema of the nipple and areola occurs especially in women earlier in life, and particularly during lactation, or in persons laboring under scabies.

2. Affected surface, in typical cases of Paget's disease, of brilliant red color, raw and granular-looking after the removal of crusts. Surface not so red and raw-looking in eczema, and not granular, but often punctated.

3. When grasped between the thumb and forefinger, superficial induration often felt, in Paget's disease, as if a penny were laid on a soft elastic surface and grasped through a piece of cloth (thin). Eczema is soft, and no induration.

4. Edge of eruption abrupt and sharply cut, and often elevated, in Paget's disease. Edge not so abrupt, and not elevated, in eczema.

5. Paget's disease is very obstinate, and only yields to extirpation or other treatment applicable to epithelioma generally. The other disease, although sometimes obstinate, yields to treatment applicable to eczema.—*Glasgow Medical Journal*.

THE DUTIES OF THE PHYSICIAN.—"Art is long, time is short, opportunity fleeting, experience deceptive, and judgment difficult." Such were the serious reflections of the father of medicine after he had labored with its problems many years, and accomplished more than perhaps any man who has practiced the healing art. In these days when so many doctors may be found who are little better than professional loafers, so many who discourage the reading of medical works, who express their contempt for original research and scoff at medical journals, regarding the accumulation of money as the only test of professional success, and who depend on their own personal shrewdness and gullibility of the people at large to excuse the title under which they thrive, the following, relative to the life of Dr. Geo. B. Winston, from the St. Louis Courier of Medicine, is refreshing:

A friend once remarked to him, "Doctor, what

necessity is there for this ceaseless labor and study at your time of life?" With a look of astonishment never to be forgotten he replied, "My dear sir I am under bonds to do it. When I offered my professional services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which human flesh is heir; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God would hold me responsible for the loss, through inexcusable ignorance of a precious human life, and punish me accordingly; and whenever I get my consent to be content with present professional attainments, and trust in my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations which, with my best endeavors to meet them honestly and conscientiously, still sometimes is almost heavier than I can bear."—*Low. Med. News*.

INFANTILE CONVULSIONS.—The adopted and regular treatment of M. Jules Simon, of the Hospital des Enfants Malades, for infantile convulsions, is as follows: On arrival, the first thing he orders is an injection of salt and water, salad oil, or glycerine, or honey, which he administers himself, as he has too often observed that the parents or the nurse have already lost their wits. If the teeth can be opened sufficiently, a vomitive is given, which clears the stomach of any food that could not be digested—the most frequent cause of convulsions. However, the attack continues but soon ceases on applying a handkerchief, on which a few drops of chloroform are poured, to the mouth, which the child inhales largely. If the convulsions reappear the anæsthetic is renewed, and the child is placed in a mustard bath for a few minutes, and then wiped dry and placed on his bed properly wrapped. Chloroform might be again administered if, after an interval, the child was seized again, and before leaving the nurse, M. Simon prescribes a four ounce potion, containing sixteen grains of bromide of potassium, one grain of musk, and a proportional preparation of opium, for he does not believe that the brain is congested in these attacks, it is rather excited, and the opium acts as a sedative. A teaspoonful of the mixture is given several times a day. On the following days the child is generally restless and irritable and ready to be attacked again, but a small blister about an inch square is applied to the back of the neck, and left on about three hours, when it is replaced by a poultice of linseed meal, and gives very satisfactory results. M. Simon, in terminating, says, "such is the treatment that I have instituted in my practice of every day."—*Proceedings King's Co. Med. Society*.

TREATMENT OF CHOREA.—Dr. Bouchut's treatment *par excellence* of chorea consists in the administration of hydrate of chloral in large hypnotic

doses, even for children. He orders for a child six years thirty grains in *one dose*, the dose to be repeated every day and increased if necessary to forty or even sixty grains. The effect of this dose is six or eight hours' profound sleep, during which the child does not stir. After a couple of days the disease abates, and in about a fortnight the cure is obtained.—*Medical Press and Circular*.

BORAX IN EPILEPSY.—Dr. Stewart Lockie reports, in the *British Medical Journal*, the case of a boy of seventeen who had been subject to epileptic seizures for four years. At the time of admission to hospital they occurred about once a week. Bromide of potassium seemed to have some slight controlling influence at first, but the frequency soon re-appeared. On Nov. 28th, 1881, borax, in fifteen-grain doses three times daily, was substituted for the bromide, and it has been continued, with an intermission of nine days, during which the bromide was renewed, to this date (Oct. 21, 1882). From the time it was commenced no serious fit has occurred, and for the last six months he has had no seizure whatsoever. No skin eruption occurred; vomiting took place occasionally, if the medicine was taken before meals, and at one period he complained of sleeplessness.—*Med. and Surg. Reporter*.

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.—Dr. Haley states, in the *Austrian Medical Journal*, that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy dull headache situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wine-glass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who a quarter of an hour before was feeling most miserable, and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.—*Lancet and Clinic*.

GALVANO-PUNCTURE OF THE PROSTATE.—Dr. Bredert (*Klin. Wochenschrift*), reports five cases of senile hypertrophy of the prostate, in which either one or both lobes of the gland were enlarged. Catheterization was impossible or could only be performed with great difficulty by bending the instrument. Having regard to the use of electrolysis in other tumors, the doctor tried it in three cases with very good results in diminishing the size of the gland. A needle electrode, insulated except at its point, was pushed into the enlarged

gland, and was connected with the negative pole of the battery while the positive pole was applied to the abdomen. Diminution of the organ took place with astonishing rapidity in one case after the third application.

TREATMENT OF EXCESSIVE SWEATING.—In the *Michigan Medical News*, Dr. Currie says that for over thirty years he has used the following prescription, without a single failure, in sweats from whatever cause: Alcohol, Oj, sulphate of quinine, ʒj. Wet a sponge with it and bathe the body and limbs, a small surface at a time, care being taken not to expose the body to a draught of air in doing it. In one case a neighboring physician was poisoned while dressing a mortified finger. He suffered untold misery, and was drenched with perspiration for a number of days, and his life despaired of. When he saw him he ordered him to be bathed immediately in the above solution, and that this be repeated once in two hours. The third application stopped all perspiration, and convalescence began at once.—*Med. Surg. and Reporter*.

DIPHTHERIA.—Dr. Lolli, of Trieste, uses exclusively the following mixture in the treatment of diphtheria, and in sixty cases the mortality was less than two per cent. the malady having a duration of but eight or ten days, and being but rarely propagated to the mucous membrane of the respiratory organs:

R—Ferri sesquichlorid. grs. xv.
Acidi carbol. pur., grs. xv.
Mel. rosæ, ʒ i.
Aque calcis., ʒ xv.

The throat is swabbed with this mixture every half hour, adults using it as a gargle, and it is, besides, to be taken in tablespoon doses, diluted, every second hour. Of course tonics and very nourishing food form most important adjuncts to the treatment.—*Journal Materia Medica*.

IODODORM SUPPOSITORIES FOR PILES.—R. Iodoform, ʒi; balsam of peru, ʒii; cacao butter, white wax, aa ʒiiss; calcined magnesia, ʒi. Incorporate the mass thoroughly and divide into twelve suppositories. Insert one after each evacuation of the bowels and oftener if needed.—*Lou. Med. News*.

FISSURED NIPPLES.—Monti recommends that the nipples should be anointed with a (freshly-made) solution of gutta-percha in chloroform, just enough of the latter being added to make the solution fluid. As it dries it forms a protecting pellicle, which does not come off even after suckling.—*Le Practicien*.

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THE PAST YEAR.

Another turn of the wheel has brought us to the commencement of another new year, which, it is to be hoped, we all enter upon with bright prospects and high anticipations. In passing in review the year that has just expired, we are reminded of the fact that the times change and we change with them, that life is short, and that little is accomplished, unless by great diligence we improve each moment as it passes. That whilst the labors of many minds in different departments, and of many even in the same department, give us after all no great addition to the stores of medical lore we formerly possessed, yet in many instances the advance has been sufficient to lead us to hope for still greater achievements in the years that are to come. The most marked attention which is being bestowed during recent years, and notably during the one just past to the study of pathology, or rather the cause of disease, is a most gratifying sign of the times and one which lends encouragement to the hope that sooner or later great discoveries in this field of enquiry will reward the diligent student.

The subject of State medicine has received considerable attention both at home and abroad. The Ontario Board of Health brought into existence during the last session of the Local Legislature has been organized and brought into working order, and already some good work has been accomplished, with a fair promise of much that is better yet to follow. A Sanitary Convention under the auspices of the Board was held in St. Thomas in the month of September, and although not a suc-

cess in the ordinary acceptation of the term, was at least a fair commencement in this regard. A recent deputation to Ottawa has been kindly received by the Dominion Government, and favored with the promise of an endeavour to do something in the way of collecting vital statistics, as a beginning, which it is hoped will result in the establishment of a Sanitary Bureau for the Dominion. The International Congress of Hygiene met in Geneva, and was largely attended by representatives from all parts of the world. Dr. Covernton of the Ontario Board of Health, was present as the representative, we may say, for Canada. (For report see LANCET for November.) The meeting was a most successful one, and will no doubt contribute largely to the advancement of this most important department of medicine, in those countries where it is still in its infancy. The next meeting of this Congress takes place in Hague, Holland, in 1884, and we venture to predict that there will then be exhibited a much greater interest in sanitary reform, and a still larger attendance of representatives than ever before.

The meetings of the various medical associations and societies have been as usual well patronized, and much good work has been done in the way of advancing the highest interests of the profession. The second annual meeting of the Ontario Medical Association took place in June and was largely attended. Dr. Covernton of Toronto presided and a large number of interesting and valuable papers were read and discussed during the two days the Association remained in session. We hope to see a still larger attendance of members next year, a greater interest manifested in the work of the Association, and an improvement in the character of the papers, which should as far as possible be made to embrace the individual experience of members themselves. Dr. McDonald of Hamilton was chosen president, and the next annual meeting was appointed to be held in Toronto, on the first Wednesday in June, 1883.

The Canada Medical Association also held its fifteenth annual meeting in Toronto during the first week in September, under the presidency of Dr. Fenwick, of Montreal, and continued in session three days. The attendance was the largest yet reached in the history of the association and the papers read were of more than ordinary interest. The association was divided into two sections—medicine and surgery, which were presided

over by Drs. McDonald and Grant respectively. This arrangement, which proved most satisfactory, gave ample time for the reading and discussion of the various papers presented. Dr. Carpenter of London, Eng., was present by special invitation, and gave a very interesting address on "Vital Statistics." A committee was also appointed at the close of the meeting to press upon the Dominion Government the necessity for the collection of sanitary statistics, and for the enactment of such sanitary regulations as may be necessary in the interest of public health. Dr. Mullin, of Hamilton, was elected president, and Kingston was chosen as the next place of meeting on the first Wednesday of September, 1883.

The American Science Association, also held its annual meeting in August last in Montreal, under the presidency of Dr. Dawson. Nine hundred and fifty members registered their names, and two hundred and fifty papers were received in the different sections. The business was conducted in nine sections, and many distinguished gentlemen were present, viz; Dr. Asa Gray, Dr. John Rae, Dr. W. B. Carpenter, Dr. Kovalevski, Dr. Kœnig, Dr. Houghton and many others of equal celebrity. Prof. Young of Princeton was elected president, and the next meeting will be held in Minneapolis Min. In this connection we may also state that the British Association for the advancement of Science, purpose holding their meeting in 1884 in Montreal.

The American Medical Association held its thirty-third annual meeting in St. Paul, Min. in June and was largely attended, upwards of nine hundred members having registered their names. The two points of special interest in the proceedings were, first, the action of the association with regard to the admission of the delegates from the New York State Medical Society in consequence of the society having adopted a code of ethics which permitted consultation with all legally qualified practitioners. The motion was referred to the Judicial Committee which reported against the admission of the delegates and the matter dropped. Second, the question of establishing a weekly Medical Journal, similar to the *British Medical Journal*, instead of the usual bulky volume of transactions, and a board of trustees was appointed with instructions to ascertain whether or not the profession would give pecuniary support to

maintain a weekly journal. The result has been that a sufficient number of subscriptions have been guaranteed to warrant the committee in entering upon arrangements for its publication after June next. Dr. John Atlee of Lancaster Pa. was elected president for the ensuing year, and Cleveland was selected as the next place of meeting on the first Monday in June 1883.

The British Medical Association held its 50th, annual, or Jubilee meeting in Worcester England in August. Dr. W. Strange presided, and there were upwards of seven hundred and fifty members present. The President in his opening address referred to the formation of the association in 1832, and also to the distinguished galaxy of names that marked that decade in medicine: Lawrence, Abernethy, Cooper, Latham, Marshall Hall, Brodie, Watson, Barclay, Gregory, Munro, Knox, Bell, Allison, Christison, Graves, Stokes, Colles &c. besides many celebrated names on the continent. He also referred to the establishment of the *Lancet* as the leading Medical Journal and its power in breaking down monopolies and redressing abuses within and without the profession. The address in medicine was delivered by Dr. Wade of Birmingham and was a review of the therapeutical methods of half a century ago. He also enlarged upon the progressive nature of medical and therapeutical science not only in the matter of new drugs but also in our knowledge of how better to use old ones. Dr. W. Stokes, of Dublin, son of the celebrated Dr. Stokes, delivered the address on surgery, in which he also passed in review the chief advances in surgery during the last half century. Those to which he gave special prominence were the discovery of anæsthesia, the antiseptic treatment of wounds, and subperiosteal surgery. The address was most eloquently delivered, the Dr. proving himself an orator of more than ordinary attainments. The work of the association was transacted in eight sections, in which many highly interesting and important papers were read and discussed. The receipts of the association for the past year were about \$50-000, and the number of members upwards of 9500.

Another item of interest, especially to a certain section of the profession in Canada, was the semi-centennial celebration of the McGill College Medical School. The event was celebrated in a fitting manner by a conversazione and banquet, and was

largely attended by representative men from all the leading universities in Canada, and several from the United States. Messages of congratulation upon the substantial evidence of success which had attended their labors in the past, and good wishes for their future prosperity were received from friends of the college in all parts of the country.

One of the most important events in the history of medicine during the past year, was the discovery by Koch of the *bacillus tuberculosis*. The tubercle bacilli are rod-shaped, and vary in length from a quarter to half the diameter of the red blood-corpuscle. They are present in tubercular formations, and in the sputa of phthisical patients, and by inoculation of these organisms the disease may be reproduced. For a time Koch's discovery seemed to carry all before it, but the sober second thought of scientists began to doubt the reliability and practical value of Koch's observations. Dr. Fornad, of Philadelphia, after a most thorough investigation, is unable to confirm the statements of Koch, and alleges that purulent matter of non-specific character, introduced into the blood of certain animals, will be followed by phthisis; while on the other hand Dr. Schmidt, of New Orleans, a reputedly able and skilful microscopist, tells us that the *bacillus tuberculosis* is merely a rod-shaped crystal of margaric acid. Whatever be the nature of these so-called organisms, it is a question whether they initiate the disease or are merely present as the result of the degenerative changes in the tubercular matter, and act as carriers of the infection.

In the early part of the year Bizzozero announced the discovery of a third blood-corpuscle, colorless, round or oval, and about one-half to one-third the size of the red corpuscle. It is said to be somewhat similar to, but not identical with, the third corpuscle of Norris, and is believed to play an important part in the clotting of the blood.

With regard to medicine, pathology and therapeutics, much progress has been made during the past year. The treatment of epilepsy by the bromides has been the subject of investigation by M. Hublé in the Salpêtrière, Ferrand, and Hughes Bennett. They all testify in favor of the bromides, although they have to admit many failures. Bromides of camphor, zinc, arsenic, sodium and potassium were the forms used. The first-mentioned was found especially useful when vertigo was a

prominent symptom, and as a sedative in cases of post-epileptic delirium and mania. The salt of zinc has a marked sedative influence on the medulla and spinal cord. It never causes cachexia or cutaneous eruptions. The bromide of arsenic in one grain doses greatly diminishes the frequency of the seizures. The bromide of sodium does not produce the profound cachexia which is sometimes produced by the potassium salt. Atropine has been used with very good success by Laskiewicz and Köllner in the treatment of epilepsy, when the bromides fail. Köllner injects subcutaneously about one-sixteenth of a grain, and states that it reduces the frequency and severity of the attacks, and the mental condition of those so treated is better than those treated by the bromides. Edlefsen and Benedikt have used curare in the treatment of old and severe cases, with great benefit. It may be given subcutaneously in doses of one-thirtieth to one-twentieth of a grain. Picrotoxine is another remedy which has been used in this affection. Conyba reports a case where a cure was effected after four years treatment with this remedy. Dr. Alexander, of Liverpool, (*Medical Times and Gazette*), has treated a number of inveterate cases of epilepsy by ligature of the vertebral arteries. The success has been such as to warrant the procedure in certain cases which are not benefited by medical treatment. In the treatment of pneumonia bleeding has come into more frequent use as a means of lowering blood-pressure in all previously healthy adults. Dr. Alix, of Toulouse, (*Bull. Gen. de Therap*) brings forward statistics to show the advantage of a liberal use of alcohol in the treatment of pneumonia. The use of the cold wet-pack has also been advocated by Dr. Flint, in the treatment of this disease. The directions are to employ the wet sheet whenever the axillary temperature goes above 103° F., the patient to remain in the sheet until the temperature falls to 102°. The subcutaneous injection of from 10 to 20 minims of sulphuric ether in the adynamic form of pneumonia has been attended with very beneficial results in several most unpromising cases, and is deserving of more general use.

Some interesting observations have been made regarding the presence of micro-organisms in croupous pneumonia. Observers have been at work in this field ever since the discovery by Reckling-

hausen of a micro-organism in erysipelas, and recently Friedlander, of Berlin (*Virchow's Archiv.*) has been rewarded by the discovery of micro-organisms in several cases of acute pneumonia. They were found in pairs, and sometimes in long chains, and especially numerous during the stage of red hepatization; also in the lymph spaces of the interstitial connective tissue, thus showing that they can pass into the current of the circulation and develop in the living tissues.

The treatment of phthisis by inhalation has received a fresh impetus since the discovery of the tubercle bacillus by Koch and Baumgarten. There can be no doubt that as an adjunct to other treatment it will be of great utility, but it can never take the place of constitutional and general treatment. Fränkel recommends the injection of antiseptics into the lung tissues in phthisis, foetid bronchitis, and gangrene of the lungs. In a patient with foetid expectoration he injected fifty minims of a five per cent. solution of carbolic acid. No fever or reaction followed. These injections are supposed to set up inflammatory action, and as a result cicatricial bands are formed which limit the tubercular process.

The investigations of Drs. Wood and Formad regarding the contagium of diphtheria seem to point to the identity of croup and diphtheria, and that all forms of inflammation about the throat and larynx are the same in kind, differing only in intensity, inasmuch as the micrococci in diphtheria are identical with those found in all buccal and pharyngeal inflammations, however slight. Micrococci are only found disseminated in the blood and tissues in the virulent forms of the disease, and their power of reproduction is most marked in malignant cases.

In the treatment of delirium tremens, Dr. Latham (Cambridge Med. Society) recommends in all cases the continuance of the accustomed stimulus, for a time at least, and that opium should be given very guardedly to those of broken down health and diseased organs.

In the treatment of acute rheumatism, salicin and the salicylates have nearly replaced all other methods of treatment. The results have been for the most part tolerably uniform and eminently satisfactory. It is especially in those cases of rheumatism which are characterized by the greatest acuteness and the highest temperature that these

remedies have achieved their most signal triumphs. Dr. Broadbent maintains, and his observations are borne out by our own experience, that when the salicylic compounds fail to control the disease at once, nothing is gained by their continued administration. He also gave it as his opinion that they had no influence upon the course of pericarditis or endocarditis; but that when used early they prevented the occurrence of these complications by hastening the termination of the disease. Dr. Green (*Practitioner*) recommends very highly, nitroglycerine in certain forms of heart-disease, especially angina pectoris. The dose is one drop of a one per cent solution in alcohol. The attacks may be warded off by the continuous administration of the remedy every three hours.—Dr. R. S. Smith, (*Brit. Med. Journal*), gives detailed histories of three cases of diabetes in his own practice, which all showed marked improvement under the influence of codeia. The improvement ceased immediately when the agent was withheld, and was renewed on its repetition. Dr. Owen (*Ind. Méd. Gazette*), reports on the treatment of acute dysentery by aconite, based on one hundred and fifty cases. He gave it in minim doses (B. P.) every fifteen minutes for the first two hours, and after that, one minim every hour. The results were, according to his analysis of the cases, very satisfactory. In the *Bull. Gen de Therap.* M. Desplats gives his experience in the treatment of 51 cases of typhoid fever with carbolic acid. He asserts that after each dose the temperature falls and the nervous symptoms abate, and the condition of the patient is greatly improved. Dr. Balfour (*Brit. Med. Journal*), adduces the theory that dilatation of the heart is the cause of the so-called hæmic murmurs. He ascertained by experiments on animals, that the condition productive of a murmur is not properly one of anæmia, but of spanæmia. In this state, the cardiac muscle being relaxed and the volume of blood increased, a certain amount of dilatation was inevitable, and the current of blood regurgitating through the dilated mitral orifice sets the relaxed auricular wall into vibration, and thus produces a murmur. The use of caffeine in cardiac disease is strongly recommended by M. Huchard (*Union Méd.*) It acts more rapidly than digitalis, and in fatty heart, where the latter is contraindicated, it unquestionably does good. The dose recommended is four,

five, or even ten grains, five times daily, if necessary to produce the desired effects. He prefers caffeine to any of its salts. Dr. Fenwick (*LANCET*) in a paper on "Venesection in Heart Disease" says he is convinced that in valvular stenosis great benefit is to be derived from occasional blood-letting, if dyspnoea, pain, or urgent symptoms be present; also in cases of valvular incompetency if urgent dyspnoea, or cyanosis exist; and in cases of acute pericarditis or endocarditis. In *Wien Med. Woch.*, Dr. Benyan recommends the use of iodoform in the treatment of diphtheria. He applies it locally in powder, pure, to the patches of membrane with a camel's hair pencil every two hours.

In the field of surgery, general and orthopædic, much valuable and important work has been accomplished. Nerve stretching in cases of locomotor ataxia, obstinate cases of sciatica, neuralgia, etc., which is still on its trial has been practiced frequently during the past year, but the results have been far from uniform in favor of the procedure. In some instances fatal results have followed the operation. Sponge-grafting has received attention from Dr. Hamilton (*Edin. Med. Jour.*). Noticing carefully the part played by a blood-clot or fibrinous exudation in the healing of a wound, as compared with the process of vascularization on a granulating surface, it occurred to him that if he could employ some dead porous animal tissue it would in course of time become vascularized and replaced by cicatricial tissue. He therefore introduced small pieces of clean sponge, in a wound under treatment. The sponge was prepared by washing out the calcareous matter by means of dilute nitromuriatic acid, and subsequently washing in liquor potassæ and carbolic acid solution 1 to 10. After a time the interstices of the sponge were filled with organizing tissue, and as soon as it became vascular the epithelium spread over it and the healing process was gradually completed. In intractable cases of club-foot, Mr. Davy, of London, removed a wedge-shaped portion of the tarsal arch by means of a fine saw, the wedge in most cases including a portion of the astragalus, os calcis, cuboid, and scaphoid bones. Although it seems a somewhat severe operation, the results obtained by Mr. Davy would seem to warrant the procedure in certain intractable cases in patients not too young. Bony union results, but even should that fail, fibrous union would suffice. Dr. Phelps, of Chateaugay,

N.Y., recommends a new operation for club-foot, which consists in dividing *all* the resisting tissues across the sole of the foot down to the bones, and leaving the wound open, to heal by granulation. He claims very good results by this treatment, but it seems entirely too severe, and is not likely to find many advocates.

Several cases of gastrostomy have been recorded during the year. Most surgeons recommend stitching the stomach to the abdominal wall and leaving it thus for four or five days before opening, while Dr. Kraske (*Centralblatt*), on the other hand, advises immediate opening, on the ground that there is danger of the contents of the stomach escaping through the stitch punctures and exciting peritonitis. Prolapsus ani has been successfully treated by M. Vidal, by means of injections of ergotine into the protruding parts. He recommends this plan in long-standing cases, and says a cure may be expected in a few weeks. Mr. Haward (*Clin. Society, London*), reports a case of splenectomy for enlargement. The operation was most successfully and skilfully performed, but the patient, while the wound was being closed, showed signs of collapse, but was revived by artificial respiration, and subcutaneous injection of ether. Five hours after the operation vomiting commenced and she died the same evening. Mr. Marshall (*Lancet*); has performed an *unsuccessful* operation for excision of cancerous stricture of the descending colon, which he terms "colectomy," to designate the operation. The diseased mass which was removed with a piece of the intestine, was about one inch and a quarter long. Mr. Bryant has also performed a very successful operation for the removal of an annular stricture of the descending colon. The operation was the ordinary one for colotomy. This operation Mr. Bryant states was the first of the kind done in England. Mr. Harrison, of Liverpool, (*Lancet*), describes a new operation for the radical cure of varicocele. He exposes the cord by an incision about an inch in length, and separates the veins which are each tied in two places by a catgut ligature. To the small veins about the epididymis he applies the thermo-cautery. Dr. Sidney, (*Lancet*), recommends the subcutaneous application of ligatures to the veins when required in the treatment of varicocele, varicose veins of the leg, etc. Three antiseptic agents have been introduced into surgery, viz., glycono-borates of calcium and sodium,

and boro-glyceride. They are, it is claimed, very efficacious and free from all irritant or poisonous effects. The two former are powerful antiseptics, very soluble in water, but the latter is more soluble in glycerine.

The treatment of anthrax by the injection of a five per cent. solution of carbolic acid has been brought prominently into notice by Dr. Lopez Rubio (*El Sig. Med.*). The injection was made subcutaneously into different parts of the carbuncle, and had the effect of checking its progress and rapidly diminishing its size. Other observers have had equally striking results from this method of treatment. Dr. Kelly, of Dublin (*Dublin Four. Med. Sci.*) advocates a new method of reducing dislocations of the humerus and femur, an illustrated description of which will be found in the present number. Several cases of removal of portions of the intestine for stricture and strangulated hernia have been reported; two or three very interesting cases will be found in the October number of the *N.Y. Med. Record*, by Dr. Fuller, of Grand Rapids, Michigan. One was a case of strangulated hernia, in which the Dr. removed five and a half inches of the bowel which was gangrenous. Another was a case of invagination, in which four inches were removed. In a third case a portion of omentum was cut off and the bowel returned.

In obstetrics and gynaecology many interesting cases have been reported during the year, but we have only space to mention a few of them. The use of antiseptics in midwifery practice has come to be regarded as a *sine qua non*, if we are to use all means to prevent septicæmia. A new method of introducing perchloride of iron into the uterus has been proposed by Dr. Von Teutleben, of Berlin. It is prepared in the form of solid sticks, and introduced into the cavity of the uterus by means of a porte-caustique. It may be partly withdrawn again to remove any clots, and then reintroduced and allowed to remain. Capillary drainage after laparotomy has received considerable attention from Prof. Hegar. His method consists in the use of a glass drainage tube inserted into the wound, and plugging its outer extremity with absorbent carbolized cotton. This is changed frequently for the first twelve hours, and when the discharge ceases the tube is removed. Strands of cotton wick, enclosed in rubber tubes, have also

been used for the same purpose with advantage. Chian turpentine, which was so much vaunted by Dr. Clay, of Manchester, has been fairly tried and found valueless in other hands.

Dr. Baker, of Boston, publishes a very interesting paper in the April number of the *Am. Four. Obstet.* upon the early, complete, and repeated removal of cancer of the uterus. He recommends the entire removal, when practicable, of the cervix on a level with the os internum when this is the seat of the disease; and where it is impossible to remove the whole of the disease, he advises the free use of the curette, followed by the thermo-cautery, for the sake of the relief which is afforded the patient, and also the prolongation of life. His practice in these respects does not differ much from that of the leading gynaecologists of the day. Credé (*Archiv. f. Gynæk.*) gives his method of preventing ophthalmia neonatorum, which consists in cleansing the eyes with warm water immediately after birth, and dropping a single drop of a two per cent. solution of nitrate of silver into the eye. This plan has been adopted in several hundred cases, and in no single instance has the disease appeared during the first seven days. When the disease appears later Credé attributes it to some other cause than infection from the mother. Dr. Frank has cured a case of incontinence of urine in a woman, by removing a portion of the posterior wall of the urethra and thus narrowing the canal. The wound healed without a fistula, and the case was successful in its results. Dr. Fehling (*Arch. f. Gynæk.*) disapproves of rapid dilatation in stenosis of the cervix uteri, and advocates several longitudinal incisions, the knife being drawn from the os internum downwards. A glass tube, with holes in the sides, is then inserted and retained in position with a tampon. The tube is removed on the fifth day and a laminaria tent introduced, and dilatation kept up until the canal is of the proper calibre. Dr. Thornton (Obstet. Society) reports a case of extra-uterine pregnancy treated by antiseptic abdominal section with removal of the fetus and the hypertrophied placenta, ending in recovery of the patient. He has also succeeded in successfully ligating the arteries of the uterus and ovaries, for the cure of fibroids. Dr. Alexander has proposed and carried into effect a new operation for certain displacements of the uterus, which the author assumes is caused by the laxity of the round ligaments. He makes an inci-

sion over the external abdominal ring, seizes the round ligament and shortens it by stitching it to the tissues around the ring. Dr. Adams (*Glasgow Med. Four.*) had devised and performed the above operation, but was anticipated by Dr. Alexander's reported cases. Dr. Orsby (*Med. Record*) mentions five cases of dysmenorrhœa, which were successfully treated with calomel combined with opium. He regards the known efficacy of calomel in all hyperplasias as justifying its use in a complaint in which the hyperplastic element is recognized by all pathologists, and his experience confirms this view. Iodoform, which has been extolled so much of late in the treatment of surgical wounds, etc., has also been introduced into gynecological practice and the results of its use are said to have been very satisfactory. Dr. Fordyce Barker gives a case of chronic membranous dysmenorrhœa—which was completely cured by the introduction of a cone of iodoform into the cavity of the uterus every second day. It is also recommended by Weissenborg and others in chronic endometritis. It is used in gynecology in different forms—as a liquid, in solid cones, and in some instances it is blown into the uterus in powder. It may be rendered inodorous, by mixing half a drachm of balsam of Peru to the drachm of iodoform. Iodoform has also been used by Dr. Fraenkel, for the purpose of rendering sponge tents aseptic. The tents are first smeared with cerate or vaseline, and then coated with iodoform. They will be found on removal after 12 to 24 hours to be perfectly free from putrefactive odor.

A new sign of pregnancy has been observed by Jorissenne (*Archir de Tocologie*). He maintains that while in health there is, as is well known, an increase in the number of pulsations of from five to ten beats in the erect as compared with the horizontal posture; in pregnancy the number of pulsations are the same without regard to position. At the last meeting of the British Medical Association Mr. Lawson Tait read a paper on "One hundred consecutive cases of Ovariectomy without any of the Listerian details. The mortality was only three per cent. Mr. Tait attributes his success to the abandonment of the clamp, the adoption of Keith's and Kæberle's method of carefully sponging out all fluid from the peritoneal cavity, complete abandonment of carbolic acid, and careful after-treatment.

The following new books and new editions of old ones have appeared during the year:—Midwifery, by Glisan; Eczema, by Bulkley; Diseases of the Nervous System, by Hammond; Manual of Histology, by Satterthwaite; Anatomy of the Nervous System, by Ranney; Diseases of Infancy, and Childhood, by J. Lewis Smith; Diagnosis and Treatment of the Chest Throat and Nasal Cavities, by Ingals; Treatise on Hernia, by Warren; Landmarks, Medical and Surgical, by Holden; Opium Habit and Alcoholism, by Hubbard; Epilepsy and other Convulsive Diseases, by Gowers; Science and Art of Midwifery, by Lusk; System of Surgery, 3 vols., by Holmes; Nurse and Mother, by Coles; Treatment of Hydrocele and Serous Cysts in General, by Levis; Chloral Hydrate in Diabetes, by Eckhard; Law of Slander, as applicable to Physicians, by Whittaker; Principles and Practice of Medicine, by Hartshorne; Nervous Diseases, by A. McLane Hamilton; Students' Manual of Venereal Diseases, by Hill & Cooper; Handbook of Diseases of Women, by Brown; Electricity, by Rockwell; Index of Surgery, by Keetly; Diseases of the Eye, by Mauthner; Human Physiology, by Dalton; Surgical Disorders of the Urinary Organs, by Harrison; Uterine Therapeutics, by Tilt; Diseases of the Eye, by Noyes; Diseases of Children, by Henoch; Suppression of Urine, by Fowler; Elements of Pharmacy, Materia Medica and Therapeutics, by Whitla; Incidental Effects of Drugs, by Lewin; Tumors of the Bladder, by Stein; Health and Healthy Homes in Canada, by Dr. Sproule, Peterborough, Ont.; Philosophy of Insanity, Crime, and Responsibility, by Dr. H. Howard, Montreal; Physical Diagnosis, by Dr. Bruen; Chemical Analysis of Urine, by E. F. Smith; Hemorrhoidal Disorder, by Gay; Diseases of Women, by Edis; Encyclopædia of Surgery, by Ashhurst; Cancer of Breast, by Munn; Organic Materia Medica, by Maisch; Homœopathy: What is it? by Palmer; Physiology, by Ashby; Text-book of Physiology, by Foster; Manual of Obstetrics, by King; Physiological and Therapeutical Action of Sulphate of Quinine, by Mason; Hypodermatic Medication, by Bartholow; Labor among Primitive People, by Englemann; Diseases of the Skin, by Duhring; Compend of Anatomy, by Roberts; Slight Ailments, by Beale; Cutaneous and Venereal Diseases, by Piffard; Nitro-Glycerine as a Remedy

for Argina Pectoris, by Murrell ; Course of Medical Chemistry, by Draper ; Transactions of American Gynecological Society, etc., etc.

During the past year the following among others of the profession, have ceased their labours:—Drs. E. Cook, Norwich ; J. Allen, Adolphustown ; J. B. Smith, Jerseyville ; G. Lount, Norwich ; A. J. Whitehead, Toronto ; W. Philip, Manilla ; H. H. Boulee, New Hamburg ; W. Wilson, Dorchester, N. B. ; J. P. Lynn, Toronto ; C. W. Hiltz, Chester, N. S. ; A. R. Lander, Frankville ; W. Weir, Merrickville ; H. Yates, Kingston ; H. Orton, Ancaster ; — McCay, Blairton ; P. A. Munro, Montreal ; F. H. Wright, Toronto ; H. Bingham, Manilla ; A. McKay, Beaverton ; G. W. Campbell, Montreal ; A. Maxwell, Bear River ; J. McMurray, Toronto ; H. H. W. Lloyd, Coldstream ; H. E. Bissett, Hawkesbury ; T. Blackwood, Pakenham ; J. Salmon, Simcoe ; A. Greenlees, Toronto ; R. H. Wight, St. John's Que. ; J. B. Bond, Yarmouth, N. S. ; B. G. Page, Halifax, J. N. Reid, Thornhill ; Hon. Dumouchel, St. Benoit, Que. ; S. Richardson, Galt ; A. H. David, Montreal ; J. R. Dickson, Kingston ; J. Fraser, Font Hill ; E. Henwood, Hamilton ; Hon. D. Campbell, Port Hood, N. S. ; W. H. Bacon, Brantford ; J. A. Sinclair, Colborne ; R. P. Morden, London ; W. Milne, Claremont ; Thos. Payne, Sr. Toronto.

Among those who have passed over to the majority in other lands, may be mentioned Mr. South, F. R. C. S., Lon. ; Profs. Draper, jun. and sr., New York ; Pirogoff, Schwann, Sir Robert Christison, Dr. Joseph Pancoast, Dr. Geo. Budd, Dr. J. Hodggen, (St. Louis), Prof. James R. Wood, Dr. John Brown, (Edin.), Sir John Rose Cormack, Prof. Spence, (Edin.), Dr. Peacock, Dr. Andrew Buchanan, (Glasgow), Friedreich, Dr. W. H. Mussey, (Cincinnati), Prof. Balfour, (Cambridge), Mr. Clover, Mr. Critchett, Sir Thomas Watson, Prof. Pirrie, Dr. S. W. Thayer, (Burlington), Prof. J. For-syth Meigs, Philadelphia and many others.

While the past year has not been prolific in great conflicts and catastrophes, it has yet had some worthy of notice. The war in Egypt, to which all eyes were directed for a brief period, and which at one time appeared as if it might involve all Europe in a clash of arms, was brought to a successful issue without very great sacrifice of human life. The medical corps in that campaign, although it received scant justice from the English

press, did its work admirably, and reflected great credit upon those in authority. The foundering of the steamer Asia, in the Georgian Bay, and the terrible suffering and loss of life, are still fresh in the memory of our readers. That such coffinships should be allowed to carry loads of freight and passengers, or even to go to sea at all in such a condition, reflects seriously upon our system of steamboat inspection. The terrible holocaust attendant upon the burning of the Poor Asylum in Halifax, N. S., is another instance of the want of care and forethought on the part of those in authority, and one that imperatively calls for more thorough Government inspection in all matters affecting the lives and comfort of our fellow-beings. A local outbreak of small-pox at Windsor, Ont., and similar outbreaks of typhoid fever and diphtheria in different parts of the Dominion, occurred during the year, but none of these were of very serious import. With these exceptions we may say that the health of the country was very good, trade flourishing, and the people prosperous and happy. In conclusion we wish our readers a happy and still more prosperous and propitious time in the new year upon which we have entered.

CO-EDUCATION IN MEDICINE.

The co-education of the sexes in medicine which has been on its trial in the Kingston Medical College, has, as was presaged by experienced educators, resulted in complete failure. The dissatisfaction which was felt by the male students for some time past in regard to joint attendance upon lectures, which had to be modified, and in some respects curtailed by reason of the presence of ladies, finally culminated in open rebellion. This action on the part of the male students was precipitated by the conduct of the ladies in rising up and going out in a body during Dr. Fenwick's lecture on physiology, because of some statement of fact in connection with the subject in hand which the students applauded, and at which the ladies took offence. These are the true facts of the case so far as we can glean, so that it is wholly a gratuitous assumption on the part of the friends of co-education of the sexes in medicine, to endeavor to lay the blame upon Dr. Fenwick and those medical colleges which were prepared to admit the students *ad eundem statum* when it was believed they had

actually left the Kingston school. As a good deal of misapprehension seems to have gained currency regarding the action of Trinity Medical College in this matter (although its position was precisely similar to that of Bishop's Medical College, Montreal, and the Western University Medical School), we are authorized to state that Trinity College in no way interfered in the quarrel, or gave the students any encouragement in their revolt. The authorities of Trinity Medical College received a telegram from Kingston, stating that a number of the students *had left the Kingston School*, and asking upon what terms they would be received into Trinity School. This, with no knowledge of the disturbance or its cause, was taken as proof that there had been some trouble that had ended in this unfortunate way. Under this impression the telegram was answered, stating the conditions on which students believed to have actually left their school might be received into Trinity. These were the same as had been laid down when, on the breaking up of the old Victoria Medical School, many of the students joined Trinity. Very soon the Trinity authorities found that the telegram had somewhat misled them, and that the trouble was not ended, but in progress, and that appearances seemed to indicate a possibility of its being all smoothed over. Immediately on this being known, the students at Kingston were congratulated by letter on the improved state of things, so different from what the telegram had seemed to indicate, and they were told that the telegram would not have been answered at all, had it not been supposed that the trouble had ended, and the hope was very warmly expressed that the future of the school might be even more prosperous than the past.

While we firmly believe in the principle of higher education for women, we have no faith in the success of the scheme for the co-education of the sexes in arts and medicine, now being pressed upon the attention of the college authorities. It can have but one result, which has already been manifested in the Kingston embroglio. With the view of obviating this and similar difficulties, we would suggest the establishment of a female medical college.

Mr. Labouchere, member of Parliament, lately stated in the House of Commons, "as a statistical fact, that those who wish to live long ought to sit up late."

VITAL STATISTICS.

On the 6th ult., a meeting of delegates from the various boards of health and municipalities in different parts of the Dominion waited upon the Minister of Agriculture in Ottawa, in reference to the establishment of Bureaus of Health Statistics for the various Provinces of the Dominion. It was urged that a measure should be introduced during the coming session to provide for the establishment of offices for the collection of health statistics in all the principal cities and towns of the Dominion, and that the \$10,000 voted last session in aid of such purpose should be supplemented by at least "another \$10,000." Boards of health are at work in Montreal, Ottawa, Toronto, Quebec, St. John, Halifax and Charlottetown, but with the formation of a Dominion Board of Health the statistics collected by these boards, and by others that may be formed, can be forwarded to Ottawa.

The following are the names of the gentlemen who composed the delegation: Col. Stevenson, Alds. Mooney, Boxer, Beaudry, Fairbairn, and Drs. Hingston, Howard, Larocque, Campbell and Mount, Montreal. Mayor Langelin and Drs. Roy, Rinfret and Dionne, Quebec. Drs. Canniff, Oldright, Playter and Geo. Wright, Toronto. Drs. Grant, Sweetland, S. Wright, H. Wright, Hill, Small, Valade, Robillard, Mark and Horsey, Ottawa. Mayor Fraser, Maloy, M.P.P., and Drs. Wickwire, Almon, Moren and Farrell, Halifax. Drs. Botsford, Bayard, Harding and Daniel, St. John, N.B. Dr. Conroy, Charlottetown, P.E.I. Dr. Orton, Fergus; and Dr. McDonald, Londonderry, N.S.

A deputation of the kind was proposed many months ago, but only quite recently was any decisive action taken in the different cities; and it was chiefly from the Montreal Board of Health that invitations were issued to the other boards. Some of the delegates urged the view that the statistics ought to be collected at once, as well from the rural districts as from the cities; and it required a good deal of argument to convince them that, while every one present desired that the statistics should be collected from the entire Dominion as soon as it were possible for the Government to adopt means for the purpose, it had been stated by Ministers that it would be quite impossible to

undertake this at present, as Parliament could not be expected at the present time to grant the very large sum of money which the work would require, and that all the Government could do now would be to make a commencement of the work of collecting. No one could dispute that under these circumstances it would be best to commence with the principal cities, whence, as the value of the returns obtained became manifest, the system could and would be extended to all parts of the country.

The delegates from Ontario and the Eastern Provinces were desirous that the Government should undertake, besides the collection of vital statistics, some other public health work, and take steps for the formation of a central bureau or board of health.

The following resolutions were eventually adopted :

Resolved,—That, in the opinion of the meeting, in order the better to prevent disease and preserve human life, it is advisable that the Dominion Government should organize and sustain a uniform system of vital statistics for the Dominion.

Resolved,—That, as immediate action is necessary, the Federal Government be invited to initiate at once a system of vital statistics where organized local boards of Health are established, so that the statistical information may be utilized by these bodies.

Resolved,—That, as Provincial legislative action is necessary, it is suggested to the Federal Government that it communicate with and secure the co-operation of the Provincial Government to pass such legislation as will harmonize with and obtain the object of the preceding resolutions.

Resolved,—That it is desirable that a central bureau of statistics be established, and if found to be within the province of the Federal Government, a comprehensive system of health returns.

Resolved,—That inasmuch as it appears by the British North American Act that matters of public health are delegated to the Local Government, this delegation has not included it with the subject of vital statistics ; nevertheless, they are of the opinion that it would have been better had it been under the direction of the Federal Government, and beg to suggest that an effort be made to obtain an amendment to the constitution in that direction.

Dr. Tache, at the close of the session, informed the deputation that he believed the Government would at once commence the collection of vital statistics in the capital cities of the Dominion, and all cities with a population of 25,000, and the appropriation of last session would probably be spent in furtherance of this object. The Hon. Mr. Pope entertained the delegates at dinner at the Russell House.

ROGERS' GROUPS.—One of the latest groups by this eminent artist is a Shakesperian one, and represents Othello, Desdemona, Cassio and Iago, at the time when the latter discovers Desdemona and Cassio in the garden together. and first excites Othello's suspicion by exclaiming : " Ha ! I like not that." Rogers' groups are now so well and favorably known both in the United States and Canada, for their natural perfection and artistic beauty, that they require scarcely a word from us in regard to their merits. They will form a most fitting Christmas present or New Year's gift, and become an heirloom in the family, a " thing of beauty and a joy for ever." See cut among advertisements.

R. H. RUSSELL, M.D., M.R.C.S., ENG.

One of the most prominent physicians in Quebec has passed away at the age of 63 years. Dr. Russell, who died on the 7th of December, practiced his profession in the ancient capital for upwards of 40 years. His name was almost a household word, and he enjoyed the confidence alike of the public and the profession in the highest degree. He was an M.D. of Edinburgh and M.R.C.S. of England, having studied his profession for many years under Dr. Douglas, of Quebec, and having obtained the medals of Sir James Simpson in obstetrics and gynecology, and the Munro prize in anatomy, as well as various other distinguished prizes. He took a warm interest in matters relating to the welfare of the profession. He was an ex-President of the College of Physicians and Surgeons of Quebec, and a Governor of that body for over thirty years. He was also an ex-President of the Quebec Medical Society, one of the originators of the Canada Medical Association, and was the first treasurer of that body. During the rebellion of 1837 he acted as surgeon to the celebrated loyal corps known as " Bell's Cavalry." He was an active, stirring character, who took a prominent share in the current events of his day. He was possessed of much originality, as well as great energy and independence of thought. His death is universally regretted, and leaves a blank which will not be easily filled. His brother, Dr. J. P. Russell, is one of the leading physicians of this city, and his son Dr. Henry Russell, of Quebec, is a worthy descendant of the good old stock.

ONTARIO BOARD OF HEALTH MAP.—Our city contemporary (December) says that "several persons have spoken to us about the unjust criticisms of the *LANCET* on this subject. That disinterested persons to whom it was shown declared in favor of the map as compared with the slips issued by the Michigan Board, and concluded with the choice remark that the *Lancet's* spleen is seemingly not yet frothed out." The *Medical News*, Philadelphia, (Dec. 16), one of the most independent medical journals in the United States, after briefly describing the map says: "But the reader wants naturally to know on what data the official announcements are made. As a health bulletin we are inclined to prefer Dr. Baker's statements of prevalence in Michigan." To use the elegant phraseology of our contemporary, What is the *News'* "spleen seemingly frothing out about"?

OBITUARIES.—Sir Thomas Watson, Bart., M.D., F.R.S., author of the "Principles and Practice of Medicine," died during the past month at the advanced age of 90 years. He was elected a Fellow of the College of Physicians in 1826, and was President of that College since 1862. He was for some time Professor of the Practice of Physic in King's College, London, and was appointed one of the Physicians-in-Ordinary to Her Majesty in 1870. He was created a baronet in 1880.

Prof. Wm. Pirrie, of Aberdeen, Scotland, died on the 21st of November at the age of 75 years.

Dr. S. W. Thayer, of Burlington, Emer. Prof. of Anatomy in the University of Vermont, died on the 14th of November, aged 65 years.

The death of Dr. J. Forsyth Meigs, of Philadelphia, from pneumonia, is announced in our exchanges.

We regret to learn that the Hon. Dr. Ross, of Three Rivers, Que., has been seriously ill, but is now in a fair way of recovery. Dr. Dow, of Fredericton, N. B., has also been so low that his life was despaired of, but is happily recovering.

Alex. Jamieson, B.A., M.D., (McGill), has been appointed Prof. of Chemistry and Physiology in the University of Kansas City.

As we go to press we learn with deep regret of the death of Dr. Pyne, Sr., former Registrar of the Ontario Medical Council.

DIRECTORY FOR NURSES.—A Directory for nurses has been established under the auspices of the Toronto Medical Society. It will be in charge of Dr. McPhedran, 7 Wilton Avenue, and will be open at all hours of the day and night. Persons in want of a nurse will always know where to apply. This is an institution very much needed in all large cities, and we bespeak for it the support and co-operation of the profession.

NEW YORK POST-GRADUATE SCHOOL.—The New York Post-graduate Medical School has thus far met with gratifying success. The second term opens Jan. 8th, 1883, and continues until April 28th without intermission. It is hoped that, with its enlarged accommodations, improved facilities for instruction and increased corps of teachers it will meet with still greater success.

SUMMER SESSIONS.—The authorities of Trinity Medical College, and the Toronto School of Medicine, have decided to hold a summer session in their respective schools, and to combine the forces of the two schools in clinical instruction in the Hospital. The session will commence about the 1st of May, and continue twelve weeks. We are happy to be able to make the above announcement, and believe it will be another important step towards the advancement of medical education in Ontario.

MCGILL COLLEGE ANNUAL DINNER.—The annual dinner of the under-graduates in Medicine of McGill College, was held at the Windsor Hotel, Montreal, on the 18th ult., and was well attended. There were a large number of distinguished guests present, and a very pleasant evening was spent in toast and sentiment. The Dean, Dr. R. P. Howard, was prevented from attending by reason of recent domestic affliction, but sent the under-graduates a very kind letter, which was read by the secretary.

LECTURE ON THE "PRESERVATION OF HEALTH."—A very practical and highly appreciated lecture upon the "Preservation of Health" was delivered to the students of McMaster Hall, Toronto, on the 1st December, by H. E. Buchan, M.A., M.D.

NO THESIS REQUIRED.—The Senate of Toronto University has abolished the statute which requires candidates for the degree of M.D. to write a thesis.

PARLIAMENTARY HONORS.—Dr. McLennan, of Margaree, is a candidate for Parliamentary honors in the County of Inverness, N. S., rendered vacant by the death of Hon. Dr. Campbell. We wish the Dr. success.

CORONER —W. L. Gray, Esq., M.D., has been appointed coroner for the County of Renfrew.

Books and Pamphlets.

THE BUSY PHYSICIAN'S VISITING LIST, CLINICAL Aid and Daily Pocket Ledger. George S. Davis, Publisher, Detroit. 1882. Price, \$2.

This is a new list, but one which will undoubtedly win the favor of the profession. It is well filled with useful hints. It is adapted to any year, and when the practice is not extensive, may last for two or more years. The clinical record is a new feature, and will be found very useful.

THE PHYSICIAN'S DAY-BOOK, by C. Henri Leonard, M.D., Detroit, Mich.

This work is already well known for its neatness, compactness and convenience. It is not encumbered with any memoranda, but is a visiting list solely, and is very light to carry in the pocket.

THE MEDICAL RECORD VISITING LIST, FOR 1883.

This elegant and popular Visiting List has just been received. It contains all that is necessary in a pocket memorandum, and is most beautifully gotten up. For excellence of material and superiority of finish, it takes front rank among visiting lists. The internal arrangement of the work is all that can be desired.

THE PHYSICIAN'S VISITING LIST; ALSO THE VISITING LIST AND ACCOUNT BOOK combined, by George H. Dietz & Co., Publishers, Louisville, Ky.

This is a new aspirant for professional favor, and one that cannot fail to give satisfaction. The arrangement and convenience of the work commends it to the attention of physicians. The text is limited to those subjects of essential importance, such as notes on "poisons and their antidotes," "emergencies and their treatment," "artificial respiration," "disinfection," etc. It is elegantly and handsomely gotten up, and will be found a most excellent pocket companion. Dietz & Co. also

publish an improved Visiting List and Account-book combined, which does away with the necessity for "posting." The work is ingeniously gotten up, and is admirably adapted for the purpose intended.

WALSH'S PHYSICIANS' COMBINED CALL-BOOK AND TABLET. Seventh edition. Price \$1.50.

We have just received the new edition of Walsh's Call-book and Tablet for 1883. This list has been before the profession for several years, and is much admired for its compactness and convenience. The erasive tablet is a feature not belonging to any other physician's list and will be found very convenient for jotting down any little item which it may not be necessary to preserve. Another good feature is a column for the residence of the patient, number and street. It also contains a list of poisons and their antidotes, posological table, fee bill, directions for analysis of urine, post-mortem examinations, besides other useful information. It may be used at any time or for any year. It is an established success, and we have much pleasure in receiving a copy.

HAND-BOOK OF WATER ANALYSIS; By G. L. Austin, M.D. Boston: Lee & Shepard, publishers. Toronto: Willing & Williamson.

The object of this little monograph is to place in the hands of persons who are not professional or expert chemists, a ready method of determining water-analysis to the extent necessary to afford a correct idea as regards its wholesomeness or unwholesomeness for drinking purposes. It is well adapted for the purpose intended and will prove of service in the direction indicated.

Births, Marriages and Deaths.

In Toronto, on the 3rd of December, 1882, the wife of Dr. W. T. Stuart, of a daughter.

In Quebec, on the 7th of December, Dr. R. H. Russell, aged 63 years.

At Claremont, on the 15th of December, 1882, Dr. Wm. Milne, aged 43 years.

At Dalhousie, N. B., Samuel Shaw, Esq., M.D., in the 64th year of his age.

On the 20th of December, 1882, Dr. James A. Sinclair, of Colborne, Ont., aged 30 years.

On the 22nd December, Dr. L. E. Olivier, of St. Ferdinand, Meganic, Que., aged 34 years.

On the 29th of December, Dr. R. J. P. Morden, of London, Ont.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

A CLINIC ON INTERCOSTAL NEURALGIA; ACUTE PLEURISY WITH EFFUSION; MITRAL INSUFFICIENCY; CROUPOUS BRONCHITIS.

BY S. S. BURT, M.D., NEW YORK.

Instructor in Physical Diagnosis, N. Y. Post-Graduate School.

Thus far we have occupied ourselves in formulating the methods employed for physical examination and mapping out the chest-wall into regions, which, though artificial, are none the less convenient. We have also defined the various tissues and organs that lie either wholly or in part in these regions. The various aids to examination have been enumerated; percussion notes and the various auscultatory signs described both those that are normally found in the chest and those that are adventitious. We have also defined their positions when normal, and their significance when found out of place, and have furnished interpretations for the various adventitious signs. We shall now make a practical application of the facts that I have described. Our first patient is a man who complains of pain in the left side of his chest. Now, what causes this pain? Remember to consider the subjective, as well as the objective symptoms. The history discloses that he had a sharp pain in the left side of the chest, and that no chill accompanied it; it was also paroxysmal and of several days duration; he has had no cough and no dyspnoea. We find him anæmic and poorly nourished; pulse and temperature normal. Inspection shows that the left side of the chest does not fully expand. Palpation reveals a point of tenderness in the sixth intercostal space. There is no dulness on percussion. Auscultation reveals

some restriction of respiration more marked on the left side, and no friction sound. The absence of fever and pleuritic friction are objective signs that enable us to exclude the first stage of pleurisy. From pleurodynia or intercostal rheumatism we may distinguish this condition by the presence of a localized spot of tenderness, while an extensive area of tenderness exists in the former, and increased pain on the slightest muscular movement. Pain is augmented by pressure in rheumatism, and often relieved in intercostal neuralgia.

Angina pectoris presents a very different and characteristic history; the pain extends from the chest to the left shoulder and down the arm, and is usually of short duration. Also upon examination a cardiac lesion is frequently found accompanying this condition. For this case of intercostal neuralgia we will apply counter-irritation, and administer opiates. A combination of morphia and atropia given hypodermically is usually most efficacious. Five to ten minims of the following solution:—

R Morphia sulphatis.....	1.	gram.
Atropia.....	.03	"
Acidi salicylici.....	.03	"
Aquæ distillatæ.....	30.	

Sig. To be used hypodermically, as directed.

Such cases of neuralgia are also benefited by cod-liver oil and quinine.

Our next patient is a man who also complains of pain in his chest. When seen by me about a week ago the pain was much more severe than now. The temperature and pulse were slightly elevated, and upon auscultation a pleuritic friction sound was heard in the right side of the chest, a diagnostic sign that might have been overlooked from the fact that there was a disinclination to take deep inspirations, had I not required him to do so. These two cases are instructive, the chief subjective symptoms being pain, while the objective symptoms are quite different. In the last instance, which is one of pleuritis, the pain has declined, dyspnoea and a slight cough remain. Let us make further examination. Inspection shows that the respiratory movement of the chest wall is nearly absent on the right side, but is increased on the left; there is no marked prominence of the intercostal spaces. Mensuration gives negative results. Palpation shows an absence of fremitus on the right side. Percussion discloses flatness in

the right infra-scapular region and right infra-axillary region, and the percussion note perceptibly higher in pitch in the right infra-clavicular region. Auscultation reveals an absence of respiration and of vocal fremitus in the region of flatness, with respiration of somewhat increased intensity on the left side. There is fluid in the right pleural cavity; the history and the symptoms help us to decide its nature. The duration has been short and without rigors or sweats, and with no increase in the temperature. By the introduction of a hypodermic needle we may obtain some of the fluid, should doubt still exist. Consolidation of the lung, which would give a decided increase of fremitus with bronchial breathing, we exclude. The diagnosis is acute pleurisy with effusion. All cases are not so clear. We will note the variations from time to time as they appear. The indications for treatment are to favor the absorption of the fluid, and to nourish the patient. An occasional saline laxative, as magnesium sulphate, a combination of potassium acetate with infusion of digitalis (grs. \times — $\frac{3}{4}$ ss.), three times a day. A dry diet as far as possible, and later, when the absorption takes place less readily, counter irritation will meet the former indication. Good food, iron and quinine and stimulants when necessary, will fulfil the later indications. Thoracentesis will not be required in this case. When the effusion is very great the operation becomes necessary. The needle of the aspirator is usually introduced in the intercostal space just below the inferior angle of the scapula. It is safer to withdraw only a small amount of the fluid at a time, yet I have drawn very large amounts from the chest without mishap; it saves the patient the annoyance of repeated operations. There is one precaution that should always be taken, and that is to strap or bind in some manner the chest wall, and administer an anodyne before the introduction of the needle, for in two instances, one in my own experience, I have known the needle to have been broken off by a violent fit of coughing, and lost in the pleural cavity. It did no injury in my case, which was one of empyema. The needle was subsequently found at the bottom of the pleural cavity, imbedded in a mass of fibrin and pus, having excited no additional inflammation.

Our third patient is this young lad who says that he has "taken cold," and that he has been coughing for several days. He has no pain anywhere,

but there is dyspnoea on exertion, and particularly severe at the present time. Examination of his chest gives no dulness on percussion, but on auscultation there is a moderate amount of sonorous breathing on both sides. The bronchitis is not extensive enough to account for the dyspnoea, and besides, it is of a longer duration than the cough. We find upon inspection that the apex beat of the heart is most distinct in the left mammillary line, beyond and below its normal position. Upon auscultation I hear a blowing murmur most distinct at the apex and in systole, an indication of mitral insufficiency. That this murmur must be always heard at the back is not true; it, however, is frequently heard there. This cardiac lesion accounts for the dyspnoea which the bronchitis has temporarily augmented. As the hypertrophy of the heart is compensatory to the mitral insufficiency we will simply caution him against over exertion and undue excitement, and direct our treatment to the bronchitis. Confinement to the house for a few days, counter-irritation of the chest with turpentine or mustard, and the administration of the following mixture will be sufficient:—

R. Tr. opii. camph.....	5.60 gram.	3iss
Ammon. carb.....	2.	" 3ss
Syr. ipecac.....	2.50	" 3ss
Syr. tolu.....	20.	" 3ss
Mucil. acaciæ ad.....	60.	" 3ij

Sig. A teaspoonful (diluted) every four hours.

We recognize two forms of bronchial affections, a catarrhal and a croupous. The specimen I hold in my hand is a cast from a case of croupous bronchitis, the second and rarer variety. It is made up of coagulated fibrin and lymphoid cells. It is not uncommon for a croupous laryngitis to extend into the trachea and bronchi, but a croupous bronchitis occurring primarily in the bronchi is less common. Little seems to be known in regard to its predisposing or exciting cause. I will give you the history of this particular case.

J. B., a school-girl, twelve years of age, of American parentage, lived in good circumstances, the surroundings sanitary, and the family history was good; no laryngeal or bronchial affections being traceable. The height of the patient was four feet eight inches, the weight one hundred pounds; complexion good, tongue clean, pulse and temperature normal. The date of my examination was nearly two years from the beginning

of the attack, and just previous to the expulsion of one of the casts.

In August, 1876, the patient suddenly, without any premonitory symptoms except a slight sense of suffocation, coughed up a whitish mass slightly tinged with blood. When placed in water it assumed the present shape. Little disturbance followed the expulsion, the child going about as usual. At irregular intervals varying from once a day, to once in five days and two weeks, she coughed up these casts with slight effort and no pain. There was no intervening cough; the exudation was thrown off usually in the early morning, sometimes at night, seldom in the daytime. This continued for nearly three years. The treatment was mainly expectant. Her general condition remained good otherwise, and now for several years she has been free from cough. Physical examination of the chest: Inspection—normal. Percussion—no abnormal dulness. Auscultation—respiratory murmur of somewhat diminished intensity at the upper part of the left lung, with what I should describe as a rustling or indistinct sonorous breathing over the left bronchus behind. No abnormal respiration elsewhere.

ON THE POSSIBILITY OF THE LUNGS RETURNING TO THE STATE OF ATELECTASIS.

BY JOSEPH WORKMAN, M.D., TORONTO.

(Translated from Rivista Sperimentale).

Tamassia, on this subject, having related his own experiments, sums up his views in the following conclusions:—

1. The doctrine of English Jurisprudence, which recognizes no necessary relation between life and respiration, proves nothing either for, or against, the hypothesis that the lungs when once distended by respiration, may spontaneously return to the atelectic state.

2. The cases cited by English writers against the diagnostic value of the pulmonic hydrostatic test, relate, in the majority, not to the phenomena of true respiration, but to organic reaction of the tissues.

3. Minute examination of the cases given by Thomas, Lieman, Schröder, Hecker and Herman, in which it might seem that spontaneous return of

the lungs to atelectasis may occur, shows that in some of them there had been no true respiration, but merely a sonorous vibration of air in the fauces, and in others, that the test had not been executed with all the necessary precautions.

4. The confusion which has arisen between the idea of atelectasis in the medico-forensic sense and the clinical, (the former being that of utter absence of air), has had no small part in giving support to the theory of Schröder, *i. e.*, spontaneous return to atelectasis.

5. In all the cases adduced by Schröder and others, the subjects were either infants immature or very feeble, which had perished by slow death quite different from that of infanticide.

6. Direct experiment on the lungs of rabbits, dogs, etc., which had just begun to breathe, showed that in no case, when the lungs were left to themselves, did they spontaneously lose so much air as to sink to the bottom when immersed in water.

7. Direct experiment on the lungs of rabbits, dogs or men, who had breathed for some minutes, hours, or years, and had been suffocated, showed that in order to deprive the lungs of floating capacity, an enormous pressure is needed.

8. Lungs but a little distended by respiration or congested, or insufflated, require less pressure to deprive them of floating power than normal lungs do.

9. Decrepid age being excluded, it may be held that the more advanced is the age of the individual, the stronger will be the resistance of the lungs against sinking under pressure, and losing the air contained in them.

10. Slowness in dying lessens the resisting power of the lungs.

11. This resistance is notably diminished by the inception of putrefaction.

12. The theory of Schröder has therefore no positive basis, and whenever the hydrostatic test and the other examinations completing it, show that there has been no air at all in the lungs, we may, with perfect security, infer that the infant had never breathed.

VENESECTON RESUSCITATED. — Dr. Fordyce Barker says he is gradually getting to bleed more frequently. He thinks it has been too much neglected in practice, and would now adopt it in some cases of abortion, and puerperal convulsions, renal congestions, with coma, convulsions, etc.

ON THE DIAGNOSIS AND TREATMENT OF NASAL POLYPI.

BY G. S. RYERSON, M.D., L.R.C.P.S., ED.*

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MR. PRESIDENT AND GENTLEMEN,—I do not propose to occupy your valuable time with a long dissertation on the pathology and clinical history of nasal polypi, but would wish to draw your attention to one or two points in the diagnosis and treatment of these growths which are of considerable practical interest.

First—As to diagnosis—the disease with which polypus is most frequently confounded is hypertrophy of the mucous membrane over the turbinated bones and septum. It can be easily differentiated from this by examining the nose carefully with a probe, laryngoscope, and nasal speculum. I may remark here that the practitioner should be provided with two kinds of nasal speculi; Bosworth's, for noses which are more or less *retroussé* answers admirably, but will be found of little use in long or overhanging noses; for such, a simple hard rubber conical speculum is best suited.

When the nasal cavity has been well illuminated you will notice in hypertrophy of the mucous membrane that the color is whiter, that there is no translucency, and that there are no folds and depressions as in the case of polypi. There is frequently also thickening of the septum, on one or both sides, a condition, but rarely associated with polypus. It is also very unusual to find a polypus springing from the septum. The subjective sensations are not very reliable for diagnostic purposes, as in both cases they are those of obstruction to nasal breathing. With the probe, in the case of polypus, one can lift them and determine their points of attachment. One should never attempt to remove these growths without carefully determining this point, and without thorough illumination, otherwise it is a mere groping in the dark, unsatisfactory alike to physician and patient.

With regard to treatment, I look upon removal with the snare as the only satisfactory mode of dealing with polypus. It is comparatively painless and almost bloodless. Several polypi can be

removed at a sitting, with very little loss of blood, and moreover, the view is not obscured by blood and clots. It is not always an easy matter to slip the noose over the growths, and valuable assistance may be had from the two little instruments I show—the first, which is simply a director with a bifurcating point, will be found of assistance in passing the wire around large growths. The little hook, the shaft of which is bent at nearly a right-angle, is useful in pulling them through the loops when it is placed in position over the tumor. Nasal polypi are exceedingly liable to recur. This recurrence I believe to be best combatted by touching the stumps with glacial acetic acid on a cotton holder—the pain it causes can be instantly stopped by spraying with this solution:—

R Acid Carbolici gr. i., sod. bibor. sod. bicarb. aa. grs. ii., glycerine ʒi., aq ʒj. Patients also experience much benefit from the use for some time after of this powder:—

R Pulv. potas. chlor. ʒii.
Pulv. zinci sulph. grs. xx.
Pulv. acid boracis. ʒii.—M

Sig.—Put a teaspoonful in a teacupful of water, and either draw in through the nose every morning, or use with the syringe or post-nasal douche.

Correspondence.

SEMPER PARATUS.

To the Editor of the CANADA LANCET.

SIR,—I am thoroughly convinced that the majority of country physicians will agree with me, when I affirm that in many instances we have not at our command, in emergencies, medicines and appliances upon which we can place reliance for the amelioration of the condition of our patients. In some cases the friends are compelled to travel many miles to get an instrument or medicine, where if a little forethought were exercised, not only this unnecessary travel could be obviated, but the suffering of the patient lessened—a great consideration. Not long since I was called to an arm and shoulder presentation, and finding it impossible to turn, I decided to use the blunt hook; but such I had not with me, consequently had to despatch a messenger to a medical friend, to come and bring his instruments. He came—minus the hook, so sent again; the hook came and the woman was

*Read before the Canada Medical Association, Sept., 1882.

soon delivered. The child was fortunately dead ; it had spina bifida, club feet and a monstrous head. Four hours of pain and mental anguish might have been spared the woman and I and the attendants relieved from anxiety—all the result of not having with me an instrument that would not cost over \$2. This was my first experience with the hook, although in practice nearly fifteen years. For nearly ten years I carried with me the instrument; but never having a case in which to use it, it was placed aside and lost, and of late years I never thought of its necessity. I had seen its use and was delighted with it, and within two hours after my arrival home I had one made by a blacksmith in the village. I mention this fact to show the high opinion I had formed of the utility of the instrument and to state that any intelligent blacksmith can make one. Do not be startled at my revelations when I tell you that, two days afterwards, I received a telegram from a person living sixteen miles north of this place, but did not go until messengers came for me. It was also a shoulder presentation. The attending physician was exhausted with his task and the woman could not have survived long. The doctor's message was, "For God's sake, come." I went cheerfully, thank heaven,—although I have, so to speak, been spat in the face for many years through man's ingratitude. I am "always ready" to assist a woman in her misery ; however poor she is, the greater claim has she on my services. I did not regret my going ; the trembling grasp of the attendant's hand repaid me at my approach to the miserable cabin. Before I had warmed myself, I handed the doctor the hook, and luckily for the woman, she was delivered in a few minutes afterwards. In this case, as in the former, the perineum was lacerated to the sphincter ani, and was attended to at once. In the former, the accident was not noticed at the time.

Considering the number of years I have been in practice and having a first-class midwifery business, wherein I have often flattered myself at my success, I must confess that my eyes were opened to the necessity of being—to use the language of my text—*semper paratus*, when two such cases had broken so suddenly on me. Now for my third case, which I attended a few days after the last mentioned. It is useless to enter into the ordinary particulars ; suffice it to say, that I found the short forceps impossible to adjust, and as a result—luckily for the

sufferer—had to send only two miles for the long ones ; and for the third time, consecutively, another lacerated perineum. The question arises, on whom, when, and where, is the next stitching to be done? I hope, quoth the raven, *nevermore!*

I am now thoroughly equipped with a fine set of obstetrical instruments, purchased from a Toronto firm, Stevens & Son, and in addition I carry a syringe, lancet, chloroform, ergot, liq. ferri perchlor., the alum egg, etc., in this obstetrical bag, so that they may not be used in other cases than those for which they are intended and save trouble in collecting them together when hurried. To make a resumé of my observations, I will divide them under the following headings :—

1st. Do not trust your abilities without the aid of every medicine, appliance and instrument, when called to a case of labor.

2nd. When thus equipped, your anxiety is relieved to a great extent, and your reputation not liable to be endangered.

3rd. Of still greater consideration, is the timely alleviation of the sufferings of one who has placed the most trying agony of her life in your hands. To you, alone, her every thought is directed ; so, be ever prepared for an emergency.

This article was written, not because of any *cacoethes scribendi* the writer has, but for the good of the fraternity at large ; for it cannot be denied that, among the 1700 doctors of medicine in Ontario, there are many who might profit by the above experience. "It is human to err," is admitted, but to knowingly walk in the ditch the second time is inexcusable ; so this article is intended to thwart the first unlucky step you may make.

SYNTAX.

Jan. 11th, 1883.

NASO ORAL RESPIRATORS.

To the Editor of the CANADA LANCET.

SIR,—I notice in your last issue of the LANCET the communication of Mr. J. L. Mills, of Brantford, in defence of the high price of the above little instrument. He says I probably forget that he has to pay 25% upon goods of this description coming from Great Britain. I do not forget this fact, but remember in connection with it, that we have other articles from the same place, far more difficult to

manufacture and much more expensive in their finish, at less cost. However, I did not accuse Mr. Mills of the extortion. Permit me, however, to defend my Kingston druggist from any attempt at overcharge—he gave it to me for what it cost him, but says Mr. Mills told him the retail price was \$4, or \$3 per doz.

Yours truly,

MEDICUS.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

October 5th, 1882.

The President, Dr. George Wright, in the chair. Dr. Spencer showed a woman with an eruption, probably syphilitic, chiefly on the face, neck, and forearms. Treatment had not been followed by much benefit. Dr. Cameron advised giving iodide of potassium in much larger doses than had been given.

Dr. A. H. Wright showed fractured os innominatum and spine.

The specimens were from a young girl, who had fallen from a window to the ground a distance of 15 feet. She probably fell on her feet and then backwards to the ground. On admission to the General Hospital shortly after the accident, she was paralyzed in the lower extremities and movement caused great pain. Examination discovered fracture of the ramus of the pubes, and it was thought of the crest of the ilium. There was a sanious discharge from the vagina; later it became purulent and offensive. Her bowels were not moved during 16 days subsequent to admission, though purgatives were fully given, but when once their action was re-established the evacuations became very frequent. She died 28 days after admission.

A *post mortem* examination was made a few hours after death. The left os innominatum was broken into seven pieces, a small piece was broken out of the bottom of the cotyloid cavity and fractures extended from that cavity across the iliac and ischiatic portions of the bone. The arches of the eleventh and twelfth dorsal vertebræ were broken off from the bodies. The spinal cord was much disintegrated.

Dr. Nevitt showed an exostosis removed from the ungual phalanx of the great toe of a young girl.

Dr. Macdonald reported a case of epithelioma of the uterus and vagina in a woman, a farmer's wife, aged 60. Symptoms first showed themselves last April in a bloody vaginal discharge, lasting for a day or two, and recurring from time to time.

No pain or hydrorrhœa. He removed as much as possible from the growths, to mitigate symptoms and prolong life.

Dr. Nevitt said he had a similar case at present under his care. He was applying the fuming nitric acid, much to the relief of the patient. Both pain and hydrorrhœa were marked.

October 19th, 1882.

The President, Dr. George Wright in the chair. Dr. Holmes was elected a member of the Society.

Dr. Reeve exhibited a patient illustrating the treatment of Ectropion by transplantation of flap without pedicle, and gave an elaborate description of the various steps of the operation. The case was a marked example of cicatricial keloid resulting from a burn. The upper lid had been treated by transplantation two years ago with a satisfactory result. The operation on the present occasion was for the restoration of the lower lid. The extent of raw surface made was 25 x 15 mm., and flap 65 x 40 mm. was transplanted from the inner side of the arm. The operation was performed three weeks ago, and the flap had united perfectly. This was the fifth case operated on by Dr. Reeve, of which four were completely successful. In answer to Dr. Cameron, Dr. Reeve, said he had not tried treatment of keloid by friction with sand; that the mode of operating by transplantation without pedicle was that developed by Wolfe, of Glasgow; and that no keloid had formed on the arm as a result of the removal of the flap.

Dr. Zimmerman reported a case of malignant disease in a compositor. He had had pain, nausea, and vomiting, for the last six years; the pain was located chiefly in the umbilical region. He had contracted the opium habit from taking medicine freely for the pain and required very large quantities to give him relief. In April last he had symptoms of lead colic. In August he had intestinal hemorrhage which recurred on several occasions subsequently. There was the cachectic appearance but no bronzing of the skin. The stools gave no indication of stricture.

On *post mortem* examination a cancerous mass was found occupying the hollow of the sacrum involving the rectum and sigmoid flexure but not lessening their calibre to any considerable degree. The left supra-renal capsule was wholly involved in scirrhous growth; the right one was healthy.

Dr. Zimmerman said the disease was rare in the supra-renal capsules, especially in one alone, and it would be interesting to know if the capsule had been primarily diseased in this case. In reply to Dr. Cameron, he said the frequency of malignant disease of the pelvic tissues in young people might be due to great activity of the sympathetic.

Dr. Graham reported a case of abscess of the tongue. It was the first case he had seen. Drs. Workman and Machell had seen cases.

Dr. Graham reported a case of a child, aged three years, with symptoms resembling those of leucocythemia. Splenic dulness was increased; the red corpuscles about $\frac{2}{3}$ normal number; and white corpuscles in proportion of 1 to 20 red ones. No history of ague. The case might be anæmia, with splenic and glandular enlargements. Dr. Cameron said he saw one exactly similar two months ago.

Dr. Graham reported a case exhibiting symptoms of bulbar anæmia in a man aged 48. The man had for years devoted himself closely to business, and suffered from debility in consequence. He went to Europe last spring, and on the voyage was seized with an attack of dyspnœa; another in London. On Oct. 5th Dr. Graham was called hurriedly at night to see him. He had awakened with another attack. In this there were a number of superficial respirations, followed by a deep one. No chest symptoms. Next day, while receiving application to the throat, was again seized. No spasm of vocal cords during this seizure. Memory is failing; he has become very emotional; is very temperate; no venereal history; urine normal; no optic neuritis.

Dr. Cameron inclined to the view that tumour of the brain was the cause. Such symptoms might arise from a form of epilepsy.

Dr. Reeve said the absence of optic neuritis did not exclude tumour of the brain, as tumour may exist for years and neuritis only develop a short time before death.

Dr. Graham exhibited pulse tracings from a case of aortic regurgitant disease in a fish pedlar. No symptoms till two weeks ago. He was passed a short time ago for life insurance. He believed the case to be idiopathic endocarditis.

Dr. McPhedran reported a case of hemiplegia in a man aged 28, due apparently to embolism. The heart is normal; no history of inflammatory rheumatism or syphilis.

Dr. Graham then read a paper on Lupus, giving the history of six cases, illustrating the different varieties. He believed *L. Erythematosus* and *L. Vulgaris* to be similar in pathological character, the difference being due to the seat of deposit. Prognosis always bad.

Dr. Cameron adopted the view of Friedlander that the two forms of Lupus are distinct pathologically. He advised treatment by oblique linear scarification or erosion, to cut off the blood supply, followed by application of iodoform and pressure.

Dr. Workman brought to the notice of the Society the desirability of establishing a registry of nurses of Toronto.

ONTARIO BOARD OF HEALTH.

The third quarterly meeting of the Provincial Board of Health was held during the early part of December. Present:—Dr. Oldright (in the chair), Covernton, Cassidy, Rae, Yeomans, Bryce, (Secretary) Prof. Galbraith

The Board went into committee of the whole to consider the Legislative Committee's report, which made the following recommendations:—That such legislation be applied for as will compel the local Board of Health in any city, town, incorporated village or township in Ontario, to appoint one or more health officers, instead of municipalities, who shall perform such duties as may from time to time be assigned to him by such local Board of Health: the Board of Health shall appoint a health officer who shall be executive officer of the Board: such health officer shall wherever practicable be a medical man, he shall report to the Provincial Board diseases prevalent and work performed generally. It shall be lawful for two or more adjoining municipalities to appoint the same person as health officer. For the prevention of persons having infectious diseases from using public conveyances: scarlet fever, smallpox, diphtheria, measles, and whooping-cough be considered as infectious diseases; that no person shall sell or dispose of bedding, clothing, or other articles likely to convey any of the above diseases or typhoid fever, that an owner or person having charge of a conveyance must not after the entering of any person infected with any of the above-named diseases into his conveyance, allow any other person to enter it without having first sufficiently disinfected it; that no person shall rent, let, or hire a house or room which has been recently occupied by any person having any of the above-mentioned diseases, before the house shall have been sufficiently disinfected under the direction of the local health authorities: that the following addition be made to the Public Health Act of 1882:—"Every municipality may provide a portable or other furnace for the disinfection of clothing and other articles, as well as such disinfecting appliances as may be admitted necessary, and may charge persons who are subject to pay such fees as may be found necessary to defray the expenses thereof. That the Act entitled "An Act respecting vaccination" be extended to towns, incorporated villages, and townships, instead of being only applicable to cities, as it is at present.

The further consideration of the subject of legislative amendments was taken up on the second day, which were as follows:—

That the Chairman of the Provincial Board of Health shall be appointed by the Lieutenant-Governor in Council, and the services of the other members of the Board, except the Secretary, shall be

honorary except when engaged in attendance upon the meetings of the Board or any of its Committees, when they shall be allowed such *per diem* as shall from time to time be determined and their travelling and other necessary expenses when so occupied; that the Act of 1882 be amended as follows:—The Lieutenant-Governor in Council may appoint a competent and suitable person as Secretary of the Board, who shall hold office during pleasure and who shall be the chief health officer of the Province; that such legislation be adopted as shall give the local Boards of Health the power of ordering an examination to be made of the water or waters used by any of the inhabitants for their respective municipalities and of regulating the construction and cleansing of wells, and for closing wells or other sources of water supply the water of which shall be found unfit for use; that the Registration Act be amended by the addition of the following clause:—"The public carrier or other persons shall not remove the dead bodies out of any municipality without first having obtained a certificate from the Divisional Registrar that the particulars relating to the death of such persons have been duly registered with him under the provisions of said Act, and said certificate shall be known as a transient burial permit." The above clauses of the report was adopted.

It was moved that a committee consisting of Dr. Oldright and Prof. Galbraith be authorized to issue a circular to Municipal Councils and local Boards of Health setting forth the evils of the privy-pit and cess-pool systems, and endeavouring to induce them to adopt such systems of disposal of sewage as shall be best adapted to the preservation of health and the circumstances of their respective municipalities, and explaining these various methods.

It was stated that a number of cases of remittent and intermittent fever at Madoc and Wingham were attributed to the unsanitary conditions which prevailed in the vicinity of these places caused by the overflow of certain dams. It was decided that the Board of Health represent the matter to the Provincial Secretary, that it might be remedied according to the Public Works Act.

DR. COVERNTON read an interesting report of his visit to England, and his inspection of the system of the Health Boards there. The report stated that during the five years preceding the introduction of an Act in England regarding infectious diseases, which provided for disinfection and isolation, the annual average of deaths from contagious diseases was as follows:—Scarlet fever, 92; smallpox, 55; measles, 50; typhus, 29; enteric or typhoid fever, 36. During the five years following the introduction of the Act the number of deaths from these diseases was reduced to the following annual average:—Scarlet fever, 64; Smallpox, 28; measles, 22; typhus, 12; and typhoid to 19. The effect of the introduction of the Act was a reduction of eleven deaths per thousand inhabitants.

The Secretary, Dr. Bryce, read the report of the Special Committee appointed to visit the Boards of Health of Boston, New York, and Albany to inquire into the details of the modes of working of Boards of Health at those places.

Dr. CASSIDY read the concluding part of the report of his recent investigation into the outbreak of typhoid fever at Stratford in the form of a letter which he had forwarded to the Chairman of the Board of Health at that place. After explaining that the fever had been contracted by impure water, which contained sewage matter he made the following suggestions:—"That pure water be obtained for drinking purposes: that until it can be obtained the water used for drinking purposes be boiled and filtered; that privy pits and cesspools be discarded for the earth closet or some similar inexpensive plan; that house drains be properly trapped and ventilated." The report was adopted.

In the evening session the report of the Convention at St. Thomas was read and adopted; also Dr. Covernton's report of the International Congress at Geneva was received.

A report of the outbreak of Enteric Fever at Lambton Mills was read. The probabilities with regard to the spread of the epidemic are that it was caused by infected linen thrown from the houses, and that the presence of a slaughter-house in rear of the houses where the disease broke out, contributed to give to the fever a malignant and fatal character.

It was moved by Dr. Cassidy, seconded by Dr. Covernton, that "Whereas typhoid fever and scarlet fever have been clearly traced, both in Europe and America, to the adulteration of the milk with water contaminated with sewage, and in other instances to the washing of the milk cans with water similarly contaminated, and the direct absorption of germs by the milk, and where other diseases such as milk sickness and *ulcerative stomatitis* have been traced to the use of milk from cows infected either with milk sickness or foot and mouth disease, this Board would recommend the local boards of health that a proper inspection of dairies should be made in order to prevent the occurrence or continuation of such evils."—Carried.

Selected Articles.

CHRONIC ALCOHOLISM.

Its Pathological Aspects.—Excerpts from an article by G. K. Sabine, M. D., in Boston Medical and Surgical Journal:

Changes in the Skin: In the early stages of this affection the skin is remarkably smooth and soft, owing to an increase in the fatty tissue. Later on the skin becomes dry and on the extremities hard and inelastic.

The Blood: The most striking change in the

blood is an increase in the watery elements, and diminution of the fibrine. It contains much serum, forms no or only very small coagula, and is of a very dark color. Another peculiarity presented by the blood is the increase of fat.

Fatty Tissue: There is a marked increase in the subcutaneous fat, in the fat between the muscles about the different organs, especially heart, kidneys, intestine, in the greater and lesser omenta, in the mesentery, etc. In the latter stages of alcoholism, when the digestion becomes impaired and the blood deteriorated, this accumulation of fat disappears. According to Rokitsky there is an increase of fat in the marrow of the bones, the bony tissue at the same time being atrophied.

The Stomach and Intestine: A Chronic Catarrhal condition of the stomach is quite constant, and appears early in the disease. This is indicated by abundant soft gray mucus, projections of the mucous membrane, and by the slaty color that occurs, especially near the pylorus. Owing to the disturbance of circulation which takes place later in other organs the return of the blood from the stomach is interfered with so that a varicose condition of some of the veins is produced. The hypertrophy is very apt to be accompanied by dilatation of the glands, due to compression at their outlet, so that small cysts which are filled with a clear fluid and project from the surface result. The continued irritation of the diseased mucous membrane is productive of a variety of ulcerations from the small hemorrhagic erosion, characterized by a superficial loss of substance, to the so-called round or perforating ulcer.

The Liver: The liver is the first and most severely affected by the abuse of alcohol of any organ in the body. The alcohol being taken up by the portal system is carried directly to this organ and there, by its irritating effect, produces various disorders according to the individual's condition, and more especially the character of the alcohol. The more concentrated the alcohol the sooner and the more severely is the liver affected. Among the causes of fatty liver the abuse of alcohol is one of the most prominent. It is probable the alcohol acts by retarding the metamorphosis of tissue, and the blood being overcharged with fat deposits it rests in this organ.

Interstitial Hepatitis—Cirrhosis of the Liver: The most common cause of this form of interstitial hepatitis, which extends uniformly over the whole organ, is usually considered to be the intemperate use of alcohol—still this is not necessary; most drunkards do not have a cirrhotic, but a fatty liver, and many persons with cirrhosis are not in the habit of dram-drinking.

Organs of Respiration: Drunkards are very subject to catarrh of the larynx, which is often accompanied by a similar condition of the pharynx. This catarrhal inflammation of the larynx not unfre-

quently extends into the bronchi. A very important question is whether the habitual use of alcohol predisposes to disease of the lungs.

The Heart: In habitual drunkards the heart is almost always found hypertrophied. This hypertrophy may be brought about in many ways. As is well known, the effect and force of alcohol is to increase the frequency and force of the pulse. When a muscle is called upon to do an extra amount of work the effect is to increase the size of that muscle.

The Vessels: The change in the capillaries consists in an increase in their lumen, that of the smaller and larger arteries in the so-called atheromatous degeneration. The dilatation of the small vessels and hyperemia of all the organs have been explained on the ground that alcohol has a paralyzing effect upon the vaso-motor system; also, that the alcohol by its irritating effect upon the walls of the vessels, causes a fatty degeneration of the same, and as a consequence a loss of tonicity.

Affections of the Urinary Organs: After each ingestion of alcohol the secretion of urine is increased as a large quantity of water is excreted with it. The diseases of the kidneys which most frequently occur in drunkards, and especially in the latter stages of alcoholism, are the parenchymatous and interstitial or granular nephritis. This latter is divided into two stages, that of infiltration of cellular elements, and the other of connective tissue formation. At first the inflammatory process produces an active hyperemia, with an exudation of fluid and white blood corpuscles into the interstitial connective tissue. This in turn is productive of anemia, impaired nutrition of the renal epithelium, and granular degeneration of the same.

The Nervous System: The affections of the nervous system in drunkards are both numerous and important. No organ, with exception, perhaps, of the liver, suffers so constantly and from such a variety of lesions as the central nervous system. Many alterations in the functions are recognizable after death by a change in the tissues, but there are various affections on the other hand, which point to a marked change in the cerebro-spinal system that cannot be detected.

The Brain: The calvarium is altered. It is increased in weight by hyperostosis and sclerosis, both the outer and inner table being thickened. The cancellated structure is more dense, owing to a concentric formation of bone about the Haversian canals. Upon the inner surface the channels of the vessels are deeper than normal as well as the depressions for the Pacchionian bodies. There is an increase in the amount of blood in the brain owing to the abnormal action of the heart and fatty or an atheromatous degeneration of the walls of the small vessels, or diminished nutrition of the same, which paralyzes them so that their lumen becomes increased and hyperemia results.

Cerebral Apoplexy: An effusion of blood into the brain substance frequently occurs in drunkards. All conditions brought about by the intemperate use of alcohol which tend to produce cerebral hyperemia favor, in a marked degree, the occurrence of either large or capillary effusions.

Serous Apoplexy: An acute or chronic serous effusion into the cavity of the skull, into the brain substance, or into the membranes of the brain, and into the cavity of the arachnoid, may result from the abuse of alcohol. In alcoholism the blood is poor in plastic material, and as a consequence the transudation is favored. Either an acute or chronic collection of fluid in the ventricles of the brain is not an infrequent result of drunkenness.

Pachymeningitis Interna Chronica: This inflammation of the inner surface of the dura mater consists at first of a very slight layer of fibrine on the surface of the dura, from which a thin layer of connective tissue is afterward developed, which adheres to the surface of the membrane. A second and third layer of inflammatory exudation is then formed, and so on until there are many layers. The dura mater thus becomes materially thickened. Each one of these layers is vascular, and occasionally one of these vessels ruptures, resulting in a hemorrhage between two of the layers.—*Louisville Med. News*.

CANCER OF THE STOMACH.

(Clinic by DR. PEPPER OF Philadelphia.)

I had until recently under my care a lady of about middle age, suffering from tinnitus in the left ear, evidently depending upon some subacute inflammatory change in the middle ear. At times, it seemed to threaten development into Menière's disease, *i. e.*, attacks of vertigo associated with tinnitus, but I cannot say that it ever fully assumed this character. She appeared to be benefited by a course of treatment which consisted in careful attention to hygiene and diet, the prolonged use of quinia with iodide of potassium and counter-irritation over the mastoid process and the nape of the neck.

Last spring, while feeling unusually well, she began to complain of a great deal of gastric distress. This was most marked after eating. It appeared to be relieved by a prescription containing pepsin, and the omission of all other remedies, but it soon returned. There was never any vomiting. Examination of the abdomen showed tenderness, but no thickening or hardening could be detected. She came of a healthy family, her mother living to the age of 82, and as far as could be discovered, no member of the family had suffered from malignant disease. There has been no sufficient cause to explain the development of gastric pain; and I have therefore, for a time, hoped that it might

prove to be a case of gastralgia, which her anæmic condition rendered not improbable. I had, however, observed that it differed from a gastralgia in two particulars. In the first place the taking of food, instead of affording relief, increased the distress. In simple neuralgia of the stomach, we generally find that the ingestion of food relieves the pain, which again appears as the stomach becomes empty. In the second place, the pain was constant, instead of being paroxysmal, as is usual in gastralgia. I therefore suspected the existence of a gastric ulcer. There was, however, no vomiting, the amount of tenderness was not extreme and the occurrence of simple gastric ulcer in a woman whose surroundings were favorable, who had good food, and who was free from all care, is unusual. * * *

As the spring went on, finding my attempts to relieve this pain were unsuccessful, I put the patient to bed and gave her an exclusive diet of milk, in small quantities at short intervals. I also gave her alteratives, such as bismuth, nitrate of silver, minute doses of carbolic acid, with soda, valerianate of zinc and various other preparations, hoping to relieve the gastric distress; but nothing afforded relief, and she became thinner and thinner. About the middle of June I went away, leaving her under the care of Dr. James Tyson and Dr. Judson Daland. When I returned I found that she had died, and that an autopsy had been held, and that the specimen now before you had been removed.

I propose to examine this with you to-day. The case, as you will have inferred, proved to be one of malignant disease of the stomach. On examining the stomach, I find a number of ovoid masses. I wet one of these and it presents the appearance of a round-cell sarcoma, but a naked eye is not sufficient to decide this point. It is, however, some form of neoplasm. I may as well say here that you will often be struck, no doubt, with the laxity with which I use the terms sarcoma and carcinoma in my clinical lectures. The truth is, the difference between these growths and their minute subdivisions, as they affect internal organs, is a matter of far greater consequence to you as microscopists and pathologists, than it is to you as physician. You have a patient in whom the symptoms and the progress of the case show conclusively that some neoplasm has developed in the stomach. The growth is going to kill the patient. The question whether it is an epithelioma, a cylindroma, a carcinoma, or a sarcoma, while of interest in the subsequent microscopical examination, does not alter the prognosis or influence the treatment. I do not use these terms in this manner because I disregard the importance of the study of these minute distinctions between the different forms of tumors; for these distinctions are of extreme importance when we come to consider tumors involving the superficial parts where they are open to

digital examination and operative interference. There we have a different history as regards recurrence after operation, as regards the tendency to extend to adjacent parts, and as regards the formation of secondary multiple growths. A consideration of the minute anatomy is of great importance in external tumors, but in the case of neoplasms affecting internal organs, as the liver and stomach, the same importance does not attach to these minute differences, nor are we able to make them. As I have said, there is hypertrophy of the glands lying in the curvature of the stomach. This enlargement of the glands extends downward, involving the glands around the aorta and along the spinal column. On section they all present the same general characteristics. They are grayish yellow, sometimes of a pinkish tinge, fleshy, without much juice on scraping, and evidently the seat of some neoplasm. The stomach itself has undergone remarkable changes. It is exceedingly small, and looks like a contracted, old, diseased, urinary bladder. If filled to its utmost capacity, it would not contain four fluid ounces. The inner surface is discolored and presents a worm eaten, trabeculated appearance. The walls are thick and rigid. On section they are found to be extensively diseased and the seat of malignant infiltration. There is fusion of the coats of the organ, particularly of the peritoneal, sub-peritoneal and muscular tunics, the mucous coat being less affected than the others. The external and middle tunics are fused into a hard, gristly mass, not less than one-third of an inch in thickness. There is not as much hypertrophy of the muscular layer as we often find, especially in cases where there has been pyloric obstruction. In the present instance the pyloric orifice is not at all obstructed. It is sufficiently large to admit the thumb. As I have said, the mucous membrane is much less involved than the external coats. There is no ulceration of the stomach, and no fungous mass projecting into the organ. This is a remarkable case, and the appearances presented are very unusual.

You see how they account for the symptoms described. There was no pyloric obstruction, and there was, therefore, no vomiting. Vomiting, in cancer of the stomach, occurs most commonly as the result of the attempt of the organ to propel its contents through an obstructed pylorus. This is the reason why the vomiting presents the peculiarities of coming on a certain interval after the ingestion of food, of occurring when the food has reached a certain stage of digestion, and of being followed by complete relief. In other cases of gastric cancer, there is an ulcerated, irritable surface, and the contact of the food against this surface excites vomiting. In such case, the vomiting resembles that which ordinarily occurs in simple gastric ulcer. There was here neither pyloric obstruction nor ulceration of the mucous membrane. Again, I never

was able to feel any lumps or hardening in the epigastrium, on the most careful palpation. The stomach was so contracted that it must have been far back and above the margin of the ribs. Towards the very close of the case, Dr. Tyson thought that he could detect a tumor. This is often the case. While during the earlier periods, and on towards the close, no tumor can be felt, yet, when the patient emaciates to the last degree, and you are able to press your fingers against the spinal column, you may then find a tumor; but in some cases where the glands were not much enlarged, I have felt until the day of death, and have been unable to discover any tumor in the epigastrium.

When you come to study closely the diagnosis between cancer of the stomach, simple ulcer of the stomach, and chronic catarrhal inflammation of the stomach, you will find that there may be in all of these, pain, progressive wasting and anæmia, and you turn to the question whether there is vomiting of such character as to indicate mechanical obstruction or ulceration, and whether a careful examination reveals hardening, thickening or a definite tumor, in order to establish the diagnosis. If in the present instance you had depended on these points, the diagnosis would have been simple ulcer, or chronic catarrh. You can easily see, from this specimen, that in a certain proportion of cases you will have to base the diagnosis upon the age of the patient and the steadily progressive, downward course, despite hygiene, dietetic regimen and judicious therapeutics. You do those things which, if it were a case of simple ulcer or of chronic catarrh, would be beneficial, yet you obtain no improvement, or, at the most, but a slight effect. The therapeutic test in connection with the steady march of the case and the age of the patient, will in some cases constitute the sole basis of the diagnosis between malignant disease and simple ulcer and chronic catarrh.—*Med. and Surg. Reporter.*

UNUSUAL AND COMPLICATED CASE OF INGUINAL HERNIA.

BY JOSEPH BELL, F. R. C. S. ED.

A. B. æt. 26, admitted Oct. 5th, a powerful, active, and very muscular policeman, amused himself by leaping over a bar, on coming down discovered that he had strained himself, and found a painful, very tense tumour, as large as a large orange, but ovoid and flattened, in his left groin. This was at once followed by urgent vomiting, intense pain at umbilicus, and great prostration. I arrived within *four hours* of the occurrence of the hernia. Dr. Blaikie noticed that there was only one testicle present in the scrotum, and on inquiry was told that the other had never been down but could be felt at times in the groin. Having given

chloroform and shaved the parts, I made a free incision along the long axis of the tumour, and found an exceedingly thin, transparent sac, tensely filled, and containing a teaspoonful of transparent serum. On opening the sac at its upper surface, about 18 inches of bowel were seen, of a very dark colour, and full of serum, but retaining lustre, polish and tension. In addition to this, a large piece of omentum was also in the sac, swollen, engorged, but non-adherent, lying like an apron over the upper half of the coil; and behind the bowel was the testicle not larger than a small walnut. The cord was also exceedingly thick and full of serum. The external inguinal ring was fairly open and easily dilatable, not requiring division; and at first it seemed as if the bowel was to be easily emptied and returned to the abdomen, as with gentle pressure nearly the whole coil at once retired from view. It was obvious, however, that it was not relieved, and that it only was returned into a largely dilated and broad inguinal canal; so I again pulled the coil fairly out, making traction on its neck which was very tightly held. I then raised the piece of omentum, which unfolded to quite the size of the palm of the hand, and, gently pulling upon it, found that it was also tightly held, and at the constriction was already black in colour, and apparently dead. Pulling the testicle also down, we found the cord also held as in a vice. The constricting point was the internal ring; and the canal being of its full normal length, this could barely be reached by the tip of my forefinger, and the tip could not be got through it.

With care, however, I guided a long, curved, probe-pointed bistoury on the point of my finger, and with great caution nicked the ring upwards till the finger could be got through it, and then, feeling no pulsation, and guiding the knife, divided it freely. This being safely accomplished, it was then easy enough to empty the bowel of flatus and gradually reduce the coils into the abdomen. The question then arose what to do with the omentum. It was difficult to believe that such a large piece could have been driven at once through such a small aperture; but there it was, and the restriction was so tight that it was almost certain to die, or at least to suppurate. So I ligatured it with thick catgut in four positions, and divided each separately, leaving the catgut ends long, to act as a drain. I then pulled the testicle and cord as far down as possible into the scrotum, and, leaving the catgut hanging out, stitched up the deep parts first, and then the edges, with strong catgut, and dressed the wound with carbolized wool. Patient was kept under opium for first few days, and on milk diet. Neither pulse nor temp. ever rose. Bowels were opened with enemata on sixth and eighth days, and cure has been most complete. Not a drop of pus formed. The points of interest in this case has to practical surgeons are:

1. The large size of hernial contents when compared with the unusually small opening in internal ring. 2. The dilated canal and external ring by presence of testicle. 3. The rapid injury to omentum, and risk to life of bowel, and after only *three and a half hours'* strangulation.—*Edin. Med. Jour.*, Dec.

INDICATIONS FOR THE USE OF DIGITALIS.

BY J. MILNER FOTHERGILL, M. D. EDIN.

The correct use of this potent remedy—invaluable in certain cases of lack of power in the heart—is scarcely as yet general. Old established views take a great deal of uprooting; and yet they must be uprooted before new views can be built up in their place on the same ground. Digitalis was long regarded as a cardiac sedative—"the opium of the heart;" because it rendered the heart's action slower, or less tumultuous. Slower, certainly, in those cases where the rapidity is due to the action of an irritable muscle; irritable, because becoming exhausted. But when the rapidity of the heart's action is due to nervous disturbances digitalis is useless, or very nearly so. Digitalis, then, is not useful "because it slows the action of the heart." This is an error. In many cases it exercises no action worth estimating upon the rapidity of the heart's contractions. While in others it is of the greatest service when the action of the heart is not accelerated before its administration, nor slowed while the good effects are being felt. "Less tumultuous," most certainly in many cases. Where a heart is labouring hard, yet accomplishing very little; when the muscle is doing its best to the utmost of its power, but is heavily handicapped; then digitalis will usually calm its action, not, however, by any sedative effect, but by increasing the vigor of the cardiac contractions. In other words, it may be said that the digitalis achieves the more complete emptying of the ventricle at each systole; and that is what is wanted in these cases.

Now, sometimes digitalis will both slow the heart's action and do away with palpitation, at one and the same time. This is most commonly seen in simple dilatation of the left ventricle, without necessarily any valvular lesion; the mitral valve may leak, but not as the result of any distortion of the valve curtains, but rather the ostium has stretched with the yielding of the heart muscle, and the valve curtains become insufficient to close the ostium completely on the contraction of the ventricle. Such a condition is common where the dilatation has taken place too swiftly for the valve curtains to stretch *pari passu* with the yielding of the muscle. Here digitalis is usually of the most priceless value. But its utility will be greatly enhanced here by putting the patient at complete

rest; which means, strictly confined to bed—just as much as if the case were one of broken thigh.

"Digitalis is to be given in mitral disease, but withheld in aortic disease," is a rule of thumb driven into the student's mind like a nail into a plank, by some teachers. Well, as a broad rule it is well enough; digitalis is usually of service in mitral disease; but how about aortic disease? When a fairly hypertrophied left ventricle is struggling against a contracted aortic orifice, but not quite successfully; how about digitalis? The system is suffering from want of arterial blood because the ventricle is unequal to driving a *sufficiency of blood through the narrow ostium in the normal time* to keep the arteries full. Here digitalis often acts most potently, indeed furnishes the most brilliant illustrations of its properties. By increasing the vigour of the driving power—the ventricular contractions—the normal amount of blood is pumped into the arteries in the normal time, and tissue nutrition is improved everywhere; including the structures of the heart itself.

Or aortic regurgitation is dilating the left ventricle too swiftly for hypertrophy to be built up to arrest the dilating process; what is the value of digitalis here? Simply inestimable. It arrests the dilating process; the ventricle recovers its size, and, with that, much of its vigour; the muscle is better nourished, and then that compensatory hypertrophy is built up which often enables the patient to pursue an active life for years.

Certainly, on the other hand, both in aortic stenosis and aortic regurgitation, while the muscular compensation is complete and sufficient, and the patient is fairly well, there is no good end to be attained by giving digitalis. We do not give digitalis because there is valvular disease present; but when the system is suffering in consequence of the said valvular lesion. The digitalis has no influence on the injured valve. But it is of mighty service when the muscular hyperplasia, which compensates the valvular defect to a great extent, is not provided by the powers of nature. By the aid of digitalis the natural powers will often be enabled to surmount the difficulty and secure a muscular growth, or hypertrophy, which is practically compensatory. Such compensation by muscular hypertrophy is most perfectly seen in aortic stenosis. And on this hangs the good prognosis of aortic stenosis.

It is quite clear that under these circumstances the action of digitalis is powerfully aided (1) by rest, reducing the demand upon the heart; (2) good food to aid in nutrition of the tissues; and (3) iron as a hæmætic. In mitral disease the effect of digitalis upon the right ventricle often leads to most satisfactory results.

Now, when we come to discuss the effects of digitalis upon the right ventricle, there is something more to be considered than the heart merely.

There is the respiration! Ordinarily we breathe 18 times per minute or thereabouts. There are about 250 inches of "residual" air in the thorax, and the act of respiration takes place normally about 18 times per minute. By such "tidal" air the "residual" air is kept fairly pure. But when the thoracic space is encroached upon either by (a) air in emphysema; (b) connective tissue in cirrhosis; (c) diminution of the calibre of the air tubes from thickening of the bronchial lining membrane; (d) by engorgement of the blood-vessels in mitral disease; then the respiration must be more frequent in order to keep the residual air fairly pure. The stimulus to respiration is the effect of venous blood, laden with carbonic acid, upon the respiratory centre in the medulla.

When there is an excess of carbonic acid in the blood circulating in this centre, then the respiratory efforts are increased in vigour until the excess of carbonic acid is got rid of. Now, when the right ventricle is embarrassed, it is not usually enough to give digitalis to increase the energy of the contractions of the right ventricle. Though, of course, all medical men of much experience have met with striking illustrations of the almost magical effects of digitalis in the pulmonary engorgement of mitral disease; many can also tell where digitalis failed to afford relief under these circumstances, or even increased the respiratory embarrassment. Now, my rule for sometime past has been under these circumstances of mitral lesion, no matter what form with embarrassed respiration, to give strychnia, a well recognized "respiratory stimulant." Here, the effect of digitalis upon the right ventricle, and that of the strychnia upon the respiratory centre, work together for good with the most satisfactory results. The good effects of this combination are conclusively demonstrated in those cases where digitalis given alone, fails to do good; but where the addition of strychnia at once makes a striking alteration. Such a case occurred to me in Nov. 1881. A medical man had a mitral stenosis, with pulmonary engorgement, and, from cold, some congestion of the lung basis. Breathing was hurried; there was orthopnoea; digitalis had made him worse. Taking in the position on the line laid down above, I added strychnia to the digitalis with the most gratifying results. The breathing quickly fell in rapidity, and the patient could sleep without being awakened by violent dyspnoea, from the respiratory centre being roused by excess of carbonic acid in the blood circulating in it. (After the blood has been cleared of carbonic acid by violent respiratory efforts, the patient drops off to sleep again. Such nocturnal dyspnoea must be distinguished from the more serious matter of dyspnoea from distension of the right ventricle—a distinction not always made.) Now, under these circumstances, the addition of strychnia, or drug of allied character as ammonia to digitalis, is

of great service. Inversely, when there exists any condition of lung, or bronchiæ by which the respiration is embarrassed, or the thoracic space diminished, then digitalis may be added to the cough mixtures with decided advantage. Whenever the breathing is embarrassed and the radial pulse feeble, while the contractions of the heart are vigorous upon auscultation—a condition which tells that the right side of the heart is labouring—then digitalis may be given with a respiratory stimulant, as ammonia, or nux vomica, or both, to the great relief of patient. Usually that is; of course, if there be anatomical changes which forbid real relief, then the effects are less palpable. The proper relations of digitalis to stimulants of the respiratory centre is a matter far from being understood generally.

The indication, then, for digitalis is not a murmur in the heart; nor a certain form of valvular lesion; nor tumultuous action; nor yet rapidity of action; but, as Rosenstein has put it, whenever it is desirable "to fill the arteries and empty the veins." That is the impression which each student of medicine should form in his mind as to the action of digitalis. If he would do so, the doubts which otherwise may beset his mind in the exigencies of practice will not often embarrass him. Say it is a case of regurgitation; if the arterial system is well filled then digitalis is contra-indicated. But if the wall of the heart be yielding in the latter stages, then surely it ought to be given. In almost all stages of mitral lesion digitalis is indicated. But there is another condition in which digitalis is sometimes given with injurious effects which contrasts with these conditions. The hypertrophied gouty heart often palpitates when there is arteriole spasm, and the larger arteries are tense and full of blood. The resistance offered by this full arterial system to the onward flow of the blood at the cardiac systole is such that the ventricle palpitates in its efforts to contract effectually—such a condition is commonly seen in the "chronic Bright's disease without albuminuria," so well described by Dr. Mahomed. Here digitalis does no good but harm; for the arteries are already full to the risk of apoplexy. Indeed, this last accident has followed the administration of digitalis under these circumstances. The full artery, then, is contra-indication. Just as much as an empty artery is an indication for the administration of digitalis,—whether the heart be diseased or not.

Digitalis is a diuretic, says another. "Whenever the bulk of urine rises then I know that digitalis is doing good." The bulk of urine, as Traube taught, is the index of arterial fulness. When the arteries are filled the bulk of urine is increased. The rise in the bulk of urine tells in the most unmistakable manner that the action of the drug is filling the arteries. In dropsy, when the bulk of urine is low, and the specific gravity

is high, then digitalis is pre-eminently useful. When albuminuria is present from venous engorgement in heart failure, digitalis will often be followed by its disappearance. As the arteries are filled, the veins are depleted; the albumen which tells of venous congestion, disappears as this state of the veins is relieved; as the arteries are filled the bulk of urine rises.

The great matter for the practitioner to remember about digitalis is, that it increases the energies of the ventricular contractions; and that the clinical indication for its administration is an empty artery. Remember Rosenstein's maxim, "digitalis fills the arteries and empties the veins." With such views before his mental vision the practitioner will rarely experience any difficulty in deciding when to give, or when to withhold the potent digitalis—potent for good or harm according to the circumstances under which it is prescribed. In cases of cerebral anæmia digitalis may often be prescribed with advantage when it is desirable to raise the blood pressure within the arteries.—*Glas. Med. Jour.*, Dec.

CIRRHOSIS OF THE LIVER.

CLINIC, BY JAMES TYSON, M.D., PHILADELPHIA.

I have recently been showing you some cases of disease of the liver, and to-day I bring before you another of the same class. Our patient is 38 years old, is a tin-roofer by trade, and was admitted to the house September 27. He had always been healthy, but for the last four or five years has been what might be called a hard drinker, frequently going on sprees. For six weeks previous to his admission he had been drinking steadily. On the morning of the day on which he was admitted, he had a very profuse hemorrhage from the nose, and that night he had a second hemorrhage, which was checked only by packing the nostrils with tannic acid. He also had some nausea and loss of appetite. The second day after his admission (September 29), he noticed his limbs were swelling, but an examination of his urine revealed nothing abnormal. About the same time his abdomen began to enlarge. You can all see to what extent this enlargement has taken place, and by placing my hand on one side of the abdomen, and gently tapping the other side, I get distinct fluctuation, showing distinctly the presence of fluid. Now, what conditions will cause the presence of fluid in the abdominal cavity? First, we have obstructive disease of the heart, which, by overloading the venous system, causes the watery elements of the blood to exude through the walls of the vessels. An examination of this man's heart fails to reveal any lesion; so we can exclude this. In the second place, it may be caused by renal dis-

ease. But if there be any disorder of the kidney of sufficient gravity to produce the amount of ascites present in this man, it would undoubtedly produce albuminuria; and we have failed to find any albumen in this man's urine. Excluding these two, then, narrows it down to the third—*i. e.*, some interference with the portal circulation. Let us examine the liver and see if we can detect any alteration in it.

Having the patient on his back, percussing in the mammillary line, we find that dulness begins at the fifth rib and extends to the edge of the ribs. In the line of the ensiform cartilage there is tympany all the way from it to the umbilicus. In the mid-axillary line, dulness begins at the seventh interspace, and passes without interruption into the dulness occasioned by the ascites. In percussing the liver you will find it to be more easily mapped out by having the patient lie on the left side and draw up his thighs towards his abdomen; and I will now percuss him in that position. Going back to the mammillary line, we find dulness begins at the sixth rib and is replaced by tympany at the eighth rib. In the mid-axillary line dulness begins at the seventh rib and is replaced by tympany at the tenth rib. Posteriorly, dulness begins with the tenth rib and merges into that of the lumbar muscles. By this examination you perceive the liver is smaller than normal.

Now, what diseases are there in which the liver is smaller than in health? I can recall but one,—cirrhosis, or interstitial hepatitis. Let us now take up this man's symptoms, and see wherein they accord with the phenomena of this affection. The first thing that he noticed was the hemorrhage from the nose, and I called your attention to this symptom. What was the cause of it? It was entirely mechanical. The blocking up of the portal system causes engorgement of the veins all over the body, and the hemorrhage from the nose was simply an effort of nature to relieve the engorgement. Hemorrhage into the stomach and intestines is a more frequent symptom, and is even more directly accounted for. Next there is the ascites. We have seen that the liver is smaller than normal, and this contraction must necessarily compress the vessels which pass through its substance. As a result of this, the current of the blood is retarded, and the serum exudes through the vessel-walls, producing the ascites.

Let us for a few moments consider the etiology of the disease. It is an error to regard the use of alcohol as the only cause of cirrhosis. In the vast majority of cases it doubtless is the cause; but I have seen cirrhosis in children two or three years of age and in young men of twenty; and Dr. Harley, in his recent work on the liver, refers to such cases (p. 307). The use of liquor, syphilis, and a prolonged exposure to malarial influences will produce it. When seen in very young subjects, it

may generally, with very good reason, be attributed to congenital syphilis.

Let us pause to consider briefly the morbid anatomy of the affection. In this case the cirrhosis is evidently due to alcohol. In the excessive use of this substance the liver is the first organ to suffer organically, because the alcohol reaches it immediately after its absorption, in a comparatively unaltered state, and diluted only by the secretions of the stomach. Acting as an irritant, if long continued it soon excites an overgrowth of the connective tissue along the ramifications of the portal vein. The first product is a round-celled embryonic tissue, by the presence of which the bulk of the liver is actually increased; but, organizing into fibrillated connective tissue, it has the property of all such new-formed tissue, it contracts, and compresses the proper parenchyma of the organ,—that is, the cells,—and destroys them. When the circlets formed by the smaller branches of the portal vein are involved, the areas included in them are compressed and forced to rise upward, forming grain-like elevations, whence the term "granular liver." When branches of medium size are involved, larger areas of liver-substance are compressed, and elevations, of which many correspond in size to the hob-nail, are produced, and there results the so-called "hob nail" liver; and when still larger branches of the portal vein are involved, we have even larger bulging areas, and a "lobulated" appearance results.

As to the treatment, I am confident that small degrees of interstitial hepatitis may be removed by appropriate measures; and even where the overgrowth of interstitial tissue is decided, the process may be so modified that the liver will be able to perform its offices. Most important, however, is the removal of the cause; and where this is the excessive use of alcohol it must be discontinued if any results are to be expected.

The remedy for the removal of the hyperplastic connective tissue is pre-eminently iodide of potassium. It is best given in moderate doses while fasting, and in a large quantity of water. Two and a half grains in a tumblerful of water and on an empty stomach will do more good than five grains in a small quantity of water after meals. Along with this, the bowels must be kept active with salines. If there be any specific taint, one-thirty-second to one-twenty-fourth of a grain of bichloride of mercury may be given along with the iodide, three times a day. In malarial cases iron and arsenic are indicated. Counter-irritation over the region of the liver may be produced by an ointment made of equal parts of mercurial and belladonna ointments. In this patient the treatment has been five grains iodide of potassium, largely diluted, three times a day, fasting, and his bowels have been kept freely open by the administration of salines. He has greatly improved under this treat-

ment, and says that he is very much better. There is still, however, some fluid in the peritoneal sac, which had much better be removed by tapping; and I had intended to tap him in your presence, but he objects to the operation, and I will not insist upon it. He will improve much more slowly than if this water were taken away.—*Medical Times*.

DISEASES OF THE HEART.—BALFOUR—In lecture ix, on the variation and vanishing of cardiac murmurs, Dr. Balfour offers a good deal of sound advice to practitioners, many of whom, he very justly remarks, are not at all aware how frequently complete restoration to health may follow after perfect development of regurgitation through either, or even through both valves. The curious phenomenon of variation in the same murmur, which may completely disappear one day to be present again the next, and the failure to appreciate its significance, have sometimes led to erroneous and embarrassing statements of opinion of the most contradictory nature. Perceiving the great desirability, therefore, of avoiding this confusion, Dr. Balfour gives directions for conducting a thorough examination of the heart in such a manner as shall prevent all possibility of deception being caused by such murmurs, and during which the stethoscope need not be employed at all. "If we trust," he urges, "to auscultation alone, as it is generally understood and applied to the heart—that is, if we attempt to diagnose the exact nature of any given cardiac lesion by the discovery and discrimination of murmurs, assigning to each its appropriate physical cause in accordance with its position on the cardiac area at which it is best heard, as well as with its rhythm or relation in time to the several acts which constitute a cardiac pulsation, without being actually misled we shall yet often fail in attaining an accuracy of diagnosis which is perfectly possible and frequently important." The value of strychnia as a stimulant of the intrinsic ganglia is pointed out, and a strong defence of arsenic as a neurotic is presented. Dr. Balfour, moreover, insists that no drug can replace digitalis in the treatment of cardiac disease, and places little trust in ergot and belladonna in this connection. The iodide-of-potassium treatment of aneurism Dr. Balfour considers perfectly safe and free from risk, while being equally certain as any more dangerous plan to afford relief. He has "not yet seen any case where relief was not attained, though naturally enough that relief is not always to be got instantaneously, but requires the treatment to be continued some time." He, however, warns against expecting absolute cure, or indeed anything more substantial than relief, except in favorable cases which come early under treatment, and in which adjuvant treatment, such as rest, etc., can be carried out. Dr. Balfour says:

"I do not claim that we can perfectly cure aneurism by iodide-of-potassium, or by anything else, yet I am quite certain that at the present day we possess no other remedial agent or mode of treatment which so surely gives relief, and so frequently prolongs life, as the iodide-of-potassium."—*Louisville Med. News*.

HYSTERO-TRACHELORRHAPHY.—Dr. Herrick, of Grand Rapids, Mich., gives the following in the *Obstetric Gazette*:—In 1880 I reported for the *Philadelphia Medical and Surgical Reporter*, vol. XLII, No. 3, a "modification of Emmet's operation" which had for its object the doing away of sutures through the uterine mucous membrane, claiming that they were unnecessary, as good union could be had without them, thus saving the patient much pain, and the operator no little trouble; and making professional assistance not absolutely necessary, as the patient could be operated upon without being etherized. As the introduction of sutures is the most tedious step of the operation, it is also the most painful to the patient, and is the only part requiring special skill. The modification in brief is as follows: The lacerated edges of the cervix are denuded as usual, care being taken that they are properly coaptated; then, instead of introducing sutures, a wide elastic rubber band shaped like the cervix, and large enough to cover the whole os and neck with the exception of a hole in the end for the secretions to pass through, is slipped over the os while the lacerated edges are held together by a pair of tenaculum forceps, over which the band is first passed. The band being wide and covering the whole neck, it keeps up equal pressure on the blood vessels, thus preventing blood enough getting into the parts at any one time to produce inflammation or swelling, and, as a natural sequence, union takes place much sooner than it otherwise would. The introduction of sutures is quite often followed by inflammation, and when suppuration follows there is non-union, which is prevented by the use of the elastic band. The advantages of this method are: 1st. As about all the pain experienced during the operation is from the introduction of sutures, if they are not introduced there is little pain, and hence an anæsthetic may be dispensed with. 2nd. If the patient is not etherized it is not necessary to have professional assistance, and one can operate upon patients that would not listen to such a proposition if strange physicians were to be present. 3rd. The parts are kept in just as close contact, and union takes place just as soon. 4th. There is less danger of inflammation. 5th. There are no stitches to remove. 6th. In slight cases, patients can be operated on without their being obliged to keep their beds for a single day, or their knowing that they are undergoing any important operation. Since the publication of this method of operating

in the *Medical and Surgical Reporter* the operation has been frequently performed, as modified not only by myself but by many other surgeons, some of whom have published their results, which have been uniformly successful. Some have objected that it is somewhat difficult to throw the band around the cervix, and to always get a band that will fit every case. Considerable care is sometimes necessary in its accomplishment, and I have found that there are other ways of retaining the lacerated edges in apposition, and the following is the plan I most frequently adopt, as it does away with that objection, and holds the parts as firmly together as though sutures were introduced through the cervix.

I take a piece of block tin about one sixteenth of an inch thick, and long enough to reach around the cervix, then cut a strip wide enough to cover the cervix from the vaginal junction to the end of the os. I then punch from three to six holes through each end of the strip, through which I pass silver wires, which are twisted with a pair of forceps until the cervix is grasped sufficiently tight to hold the lacerated edges firmly together. This procedure is easily accomplished, and answers every purpose of sutures.

RULES FOR EXAMINATION OF URINE.—During a private lecture on the pathology of renal diseases, Dr. Formad gave the following practical points as "rules for examination of the urine :"—

1. Sediment in the urine has no significance unless deposited within twenty-four hours.

2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen.

3. Every white crystal in urine, regardless of shape, is a phosphate, except the oxalate of lime, which has its own peculiar form, urine alkaline.

4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline.

5. Mucus, casts, pus, and epithelium signify disease of the bladder (cystitis) or of other parts of the urinary tract, as determined by variety of epithelium.

6. The urine from females can often be differentiated from the urine of the male, by finding in it the tessellated epithelium of the vagina.

7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen.

8. Broad hyaline casts and epithelial dark granular and oil casts signify chronic catarrhal nephritis. At first, albumen; later, less.

9. Hyaline and pale granular casts and little or no albumen signify interstitial nephritis.

10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease.

11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts or devour them entirely in a short time.

12. Uric acid in the urine may in Trommer's test for sugar form a protoxide of copper, thus often deceiving the examiner in the belief that he has discovered sugar. Thus when urine shows only a trace of sugar, other methods of examination, besides the Trommer's, must be used—preferably the lead test.

13. The microscope gives us better ideas of the exact condition of affairs in the examination of urine than the various chemical tests. Therefore the time has come when every true physician should know how to handle a microscope.—*Louisville Medical News*.

THE SEQUEL OF A MEMORABLE OPERATION.—A few days since Prof. W. H. Pancoast, at a clinic in the Philadelphia Hospital, introduced a young man who was once the subject of a remarkable surgical operation, being the separation of an infant from a monstrosity which was virtually another chaotic foetus developed from his cheek. The person referred to was G. W. Lytle, a young man of twenty-four, residing at Cornellsville, Pa. His only peculiarity was a deep scar on the left cheek. Dr. Pancoast then gave the class an account of the operation, of which there had been but three performed, one each in London, Paris and Philadelphia, and which consisted in cutting apart two children who were congenitally attached. The operation was performed twenty-four years ago, by Prof. Joseph Pancoast, when the young man at the clinic was an infant of seven months. The child was born with an appendage growing from the left cheek, which was nothing else than an imperfectly developed infant, with hands, feet and trunk, but no head. The operation was performed at a clinic in Jefferson Medical College, and was witnessed by many of the prominent physicians of the city. The operation was fully described in the *Medical and Surgical Reporter* by Dr. R. J. Dunglison. It was considered bold surgery, but Dr. Pancoast was confident of its propriety, and accordingly performed it, with what success was shown by the presence of the patient himself, nearly a quarter of a century later. An interesting feature of the operation is its having been performed with the écraseur, then a new instrument, and the first of the kind ever used in America, and brought from Europe by the elder Pancoast. Upon dissection the monstrosity was found provided with heart and gastro-alimentary tract, as well as the organs already referred to. The case attracted considerable attention abroad, and at the request of the eminent English surgeon, Sir James Paget, a cast of the detached mass and a photograph of the child before the operation were furnished to the museum of St.

Bartholomew's Hospital, London. Dr. Pancoast exhibited a copy of the daguerreotype sent to Sir James Paget, and said he would have a photograph of the young man taken after the interval which has now elapsed, and which testifies to the wisdom and success of the operation.—*College and Clinical Record*.

ECZEMA.—Jonathan Hutchinson, F.R.C.S., *Med. Press and Circular*, gives the following:—

The symptoms are in a large majority of instances so far local that it is curable by local measures, and scarcely, if at all, by constitutional ones, whether drugs or restrictions as to food. Yet it is probable that there is always a minor degree of constitutional proclivity, and this is sometimes proved to be hereditary. In a few cases dietetic restrictions do appear to have important influences, as, for instance, the forbidding of milk and sugar. I have already alluded to the remarkable way in which eczema appears to aggravate itself, and when once it has begun is its own source of extension. Probably a great many cases which become severe and general might have been stopped in the beginning by appropriate local treatment. In most forms of eczema arsenic is useless, and this fact serves to detach it definitely from the psoriasis group. There are, however, certain forms of nummular eczema in which well-margined patches are scattered symmetrically over the limbs and trunk, in which the disease approaches very closely to a form of psoriasis group. There are, however, certain forms of nummular eczema in which well-margined patches are scattered symmetrically over the limbs and trunk, in which the disease approaches very closely to a form of psoriasis, and is more or less under the control of the specific for the disease.

Putting aside a large number of mild or local cases which are clearly due to local causes, we encounter severe eczema in the following forms:—First, as a disease of the dentition period of infancy, or what is often equivalent, the lactation or milk-fed period; second, as a most persisting and troublesome eruption affecting only special regions in children and adults, as, for instance, the hands, the lips, and the anus; thirdly, as a general and severe eruption in advanced adult or senile periods of life. It is a noteworthy fact that when infants who have suffered very severely get well, they usually get quite well, and remain well through life. General attacks affecting the whole body occur for the most part near the extremes of life. Applications containing tar, if weak enough, will almost always both prevent and cure eczema. Sea air is often definitely advantageous, and the disuse of milk and sugar is often important.

With such facts before us can we find answers to the questions: Is eczema usually a sign of gout, or any allied condition of defective digestion? Is it catarrhal? Is it due to structural idiosyncrasy

of the integument? I should incline to reply that it is certainly not catarrhal in any correct use of the word. It is not produced by the common causes of catarrh, nor does it display the clinical course of all catarrhs in the tendency to spontaneous recovery and frequent repetition. Next, in many cases, it does imply a minor degree of mal-assimilation alleged to gout, and is benefited by abstinence from beer and wine. Recent experience has led me to believe that the offending article is often milk, and to think it of importance to restrict it as much as possible. In very many, a large majority of cases, there is no true gout, either in the patients or relatives.

MYXEDEMA.—Dr. Allan McLane Hamilton has recently published a case of this disease. It is generally believed to be rare, not more than fifty cases having been reported since Sir Wm. Gull reported the first cases to the London Clinical Society in 1873. It is possible, however, that its rarity is due to the fact that Sir William's descriptions of it are not generally known to the profession and that it is often confounded with other diseases. It has been called a "cretinoid state supervening in adult life in women." There is more or less swelling diffused over the whole body, the skin has a peculiar harsh doughy feel but does not pit on pressure like ordinary œdema. Eruptions are sometimes noticed, which are not inflammatory, but transude a clear liquid and disappear speedily. The understanding appears to be obtuse, the hearing dull, speech slow and locomotion feeble, as though fatigued by carrying a great load. The thyroid gland has been found atrophied, the hair thickened and the nails flattened. The mental obtuseness has caused the disease to be looked upon as a kind of cretinism, resembling the *endemic* disease of that name found in the south of Europe. Some of the cases have exhibited temperature below the normal— 96° to 97° , have experienced severe *hemicrania* and a peculiar difficulty in expressing linguals in speech. The complexion has the peculiar waxy hue so often seen in diseases of the kidneys, but albumen is rarely seen in the urine. The pulse is small, the sphygmograph tracings indicate increased arterial tension, but no cardiac disease has been observed. Numbness and fornication of hands and feet have been a cause of complaint. *Anæmia*, deficiency of red corpuscles, and greatly increased frequency of pulse after slight exertion have been commented upon. The French have named the disease *cachexie pachydermique*, because of the constitutional symptoms and the peculiar thickness of the skin. Hearing, smell and taste are often lost or greatly interfered with. The ophthalmoscope has revealed nothing positive. The disease is very rare in males, has not been seen earlier than the fortieth year and seems to be almost confined to women who have

passed the *menopause*. All of the women attacked have been very fertile—families ranging from five to ten children with some miscarriages. Great fecundity of patients has been brought forward as evidence that exhaustion of the sympathetic nervous system is at the bottom of the disease. The pathology of the disease is as yet unsettled, one school of observers endeavoring to confine it to the cerebro-spinal nervous system, another to the sympathetic system and a third think the trouble is of *peripheral* origin, that there is primarily obstructed lymph channels with *infiltration of serum* into the connective tissue and end organs of nerves. The prognosis is bad, one case only known to have recovered. Autopsies have been few. It must be readily recognized by the characteristic hardening and thickening of skin, mental obtuseness, lowered temperature, atrophy of thyroid gland and diminished general cutaneous sensibility. Treatment has been nitro-glycerine, amyl nitrite, baths and iodide of potassium.—*Mich. Med. News.*

THE BACILLUS.—Some one has said that "history repeats itself." This aphorism, in some respects, is just as applicable in the history of science as in the history of society. Medicine has its "new departures" and fashions as surely as any other factor in human events. This, of course, is more commonly so in "aesthetic" medicine—homœopathy—but occasionally it reaches the scientist. It was the fashion in the primitive days of medicine to represent disease as an indwelling foe, a mighty homunculus, who sized upon the vital forces within the body, controlled their action, traversed the great avenues of circulation and besieged the very citadel of the soul itself, and if not defeated in time the patient must die. Succeeding this came the age of humors. Then special influences, where each organ was governed by its particular Deity. Then inflammation was the sole cause of all human infirmities. And now we return again to the original idea, that of the personification of disease. Hence it is the fashion to hunt out this microscopic enemy, define his shape, size and habits of life. Give him a name, and then, if this style is not after our ideas of propriety, educate and civilize him, that he may become a potent soldier to war against his barbarous ancestors. Jenner "builded wiser than he knew" when he tamed the vicious spirit of small pox virus and made it a protecting agent against that dreaded disease. Commencing with his experiments, the idea of the bacillus has gradually engrafted itself upon the minds of medical investigators, until today we have it claimed that the great catalogue of the most serious diseases known to men are produced by the presence of bacilli in the body. Salisbury years ago gave us the bacillus of malaria, and Crudelli, from Italy, adds his testimony to confirm the theory. From Germany we have bacillus

typhosus—Klebs; from France bacillus anthracis—Pasteur; from Berlin bacillus tuberculosis—Koch; from Philadelphia bacillus of diphtheria—Wood and Formad; and from Chicago bacillus of swine-plague—Detmers, with several others to hear from. The experimental researches by these experienced and careful investigators have been so conducted as to inspire the confidence of the profession, and have no doubt established the fact that the presence of certain parasites is really the cause of certain forms of disease. Yet it is well for us to remember that there are other forces acting to undermine the health of our people. Sir Charles Lamb once remarked, that "we often laugh at the folly exhibited in a large flock of sheep, by their great haste to jump a fence, just because the principal sheep in the flock led the way, but we forget that we sometimes are governed by the same influences." So in medical science. We are too apt to rush off after some new theory, just because one of the leading workers has declared his faith in that direction. The great Vienna "Simon" (Billroth) says, "thumbs up," and up goes the great surgical thumbs all over the world; and alas! for the poor stomach that must be resected. And Lister declares for spray and gauze, and he who fails to use them is not in fashion. Now, we do not wish to be understood as underestimating any of these advances, but let us remember that the saving quality of the true physician is caution. "Prove all things and hold fast to that which is good." So with the bacillus. We should be sure of our enemy before we forsake the precepts of our fathers and their weapons of fighting disease, and when we have carefully determined between those diseases which are parasitic and those which are not, then the practical question to be investigated is, what shall we do with this microscopic enemy? But don't forget that he may be present, and still not be the cause of the trouble, or you may direct your batteries against an innocent party. Lister fences him out with spray, and oiled silk, and gauze. Declat fights him with phenic acid, while Pasteur captures the little demon, civilizes and domesticates him, and makes him a useful member of society. Each method, no doubt, has its proper place, and we have every reason to believe that progressive investigators will separate the truth from error in all this work, and when the pathology is clearly established the mode of action will soon be well defined.—*West. Med. Reporter.*

A SPOON IN THE STOMACH.—On the 10th of September of the present year a youth, whilst playing with a spoon, swallowed it. He was taken at once to the Hospital Lariboisiere, Paris, where he complained of pain in the epigastrium and tightness of breathing. During the day vomiting set in, the patient could not sleep, and there were no signs

of the offending article changing its position. The size of the spoon, too, made its passage either way very problematical. It was $9\frac{1}{4}$ inches in length (24). M. Felicet, in whose charge the patient was, determined upon gastrotomy. Before the operation was commenced the stomach was washed out with Vichy water. After the peritoneum was reached and the bleeding had been checked—the stomach had been distended with ether vapor, which was forced in by means of a pump—the peritoneum was now divided on a director, whereupon the now distended stomach wall bulged through the opening. Before being opened, the stomach was stitched to the abdominal wall, and the firmness of the stitches was tested by further distension of the stomach with ether vapor. The stomach was then opened, and the spoon removed. Lister's dressing was employed. The further course was favorable, and the patient was discharged after three weeks, with only a small fistula remaining.—*Medical Press.*

TREATMENT OF ENLARGED TONSILS.—The *Medical News*, quoting from the *Lancet*, relates the following expedient when the tonsils are enlarged and when excision cannot be performed. Dr. Gordon Holmes advises a method of applying the common caustic to the tonsils, which appears to have remained hitherto unnoticed. The tonsil, as the anatomist knows, is permeated by several rather large channels around which the follicles are collected, opening on the pharyngeal side of the gland, whence its characteristic cribriform aspect. Their orifices, about seven to fifteen in number, are sufficiently evident to be counted on the healthy tonsil in situ, whilst in the hypertrophied condition these openings increase greatly in calibre and depth, and can be ascertained by a probe to vary from one-eighth of an inch to half an inch in length, with a diameter capable of admitting a style of ordinary size. These observations, then, afford a valuable indication for treatment; for through these natural canals a way lies open to attack the heart of the gland in a most efficacious manner with caustics. Thin pointed sticks of nitrate of silver or chloride of zinc can easily be pressed into the lacunæ and worked around for a few seconds. Small sloughs are thus formed, which are soon discharged, and in the process of this treatment the tonsils are hollowed out in one direction whilst being contracted into much smaller bulk by the subsequent cicatrization in another. Two or three channels in each tonsil can be cauterized daily or on alternate days, and we can thus act on a comparatively large surface whilst causing but slight external soreness and little or no suffering to the patient. In practising this method, although the stronger caustics may be used, he does not think it will be necessary to have recourse to anything more potent than nitrate of silver, which acts much

more effectually on the tender, internal structures of the tonsil than when applied to the comparatively callous pharyngeal surface.—*Chicago Med. Review.*

THE "SALISBURY" TREATMENT OF PHTHISIS.—In the opinion of the author, consumption comes from continued unhealthy alimentation, and must be cured by removing the cause. "This cause," he says, "is fermenting food and the products of this fermentation;" and if the simple directions contained in the book "are faithfully followed out and persisted in, consumption in all its stages becomes a curable disease." Beginning at the first direction, half a pint of hot water is to be drunk an hour before each meal and on retiring, to wash out the stomach. Tea, coffee, or beef tea may be drunk at meals, and hot water or beef tea in the intervals, if desired. For food, broiled beefsteak, without fat or bone, broiled chicken or game, oysters, and fish, free from fat are prescribed, with bread, toast, rice, cracked wheat or oatmeal, in the proportion of one part by bulk to from four to six parts of meat. Soups, vegetables, fruits, pies, cakes and sweets, pickles and preserves, fried edibles generally, and vinegar are prohibited. Meals are to be taken at regular intervals, and the patient should eat either alone or with others using the same diet; and after the appetite increases, as it soon does, lunches of broiled beefsteak and tea, coffee, beef tea, or hot water are permitted between the regular breakfast, dinner and supper. In the way of general regimen, two thorough baths with hot water and soap are to be taken every week, oiling the skin all over afterwards, and every night and morning the body is to be sponged with hot water, containing for the evening bath a few teaspoonfuls of ammonia. Flannel is to be worn next the skin, and the clothing frequently changed and aired. This, with as much open-air exercise as can be borne without fatigue, or thorough rubbing and pounding of the body morning and evening for those too weak to take exercise, constitute the substance of the treatment; but simple tonics of oil of peppermint, orange peel, ginger, witch-hazel, and other mild ingredients are to be administered before each meal, with small doses of pepsine afterwards, and a hemorrhage is to be checked by inhaling the spray of a weak solution of persulphate of iron.—*Boston Jour. of Chem.*

SAFETY HYPODERMIC INJECTOR.—The little instrument which is accurately represented in the figure is intended as a substitute for the hypodermic syringe. The injector consists of two parts: an elastic measuring ball and an injecting needle; the latter is provided with a boss, which serves for a handle during its introduction. It is conveniently furnished with a joint, so that the same needle

may be adjusted on several measuring balls. The prefix "safety" is employed to indicate the important fact that its simple construction affords a valuable safeguard against accident, and that it renders an overdose practically impossible. The measuring balls are made in different sizes, and each ball is capable of holding only a definite amount of fluid, the quantity varying from one to twenty minims. The number placed on the exterior of each ball expresses its capacity, so that by selecting an injector the exact dose can be at once administered.



The instrument can be instantly charged by compressing the elastic ball and inserting the point of the needle or the open end of the joint into the fluid to be injected, and it is generally advisable to repeat this little operation two or three times to ensure the complete expulsion of air. It can be discharged slowly or rapidly under the skin, and this is of course regulated by the pressure of the thumb and finger. It can be washed out and cleaned in a moment, and it is no trouble to keep in order for any emergency. It cannot be broken by an accidental fall, which is too often the fate of the hypodermic syringe, and when it is worn out, it may be very easily replaced. The injector can be used if necessary under the bedclothes, and as a mistake in the dose is impossible, the performance of the operation does not require the guidance of the eye. It has still another important quality, which cannot fail to increase its utility—the cost is so moderate that a separate instrument can be used for every remedy as well as for every patient.

In conclusion, the safety hypodermic injector will serve many important surgical purposes, and is a perfect substitute for the syringe in the treatment by injection of *nævi* and other tumours. It is made by Messrs. Mayer and Meltzer, 71, Great Portland-street, and can be obtained from that firm in the form of a single instrument, or in a little case containing several injectors of various sizes. The surgical needle is furnished with three openings at the point to facilitate the escape of fluid into the tissues.—*Dr. Cousins in Lancet, Dec. 9th, 1882.*

ACUTE MILIARY TUBERCULOSIS.—[The following is an extract from the *Lou. Med. News* of a clinical lecture by Dr. Whittaker, Cincinnati.]—Ed. This man came into the house with the symptoms of typhoid fever: he had nose-bleeding, bronchitis, tenderness to pressure over the abdomen, diarrhea and a roseola. It was a clear case of typhoid fever; but we kept a record of the temperature. It did not show the "step-ladder rise in the first week,

nor the continuous fever of the second and third weeks. It was higher in the morning than in the evening, a most suspicious circumstance. Instead of falling on the twenty-first day or thereabout, it continued, and it still continues now, at the end of the sixth week, long after the subsidence of all typhoid symptoms. Six weeks have now passed and our patient is no better. On the contrary, he is worse; he has night-sweats, he is reduced in flesh and strength, he has no appetite, and he not only continues to cough, but he has an expectoration, scant, it is true, but of peculiar character, glutinous, flocculent, and so heavy that it sinks to the bottom of a vessel containing water. His temperature varies now between 101° and 102° ; his breathing is shallow, superficial, and hurried on the least effort. There are fine dry rales all over the chest, but there is, as you observe, no dulness; on the contrary, there is an increased resonance every where, at the apices where there is almost tympanites.

A practitioner of the "experience" school would declare this case to be a relapse of typhoid fever, or at most a complication with caseous pneumonia or phthisis florida. But there is no proof that this patient ever had typhoid fever; for in the first place there never was any "smoke" about the brain, his mental faculties have always been perfectly clear; and in the second place, a point upon which we lay especial stress, he has never shown the range of temperature which distinguishes this disease. Now a man may have typhoid fever absolutely without fever, as without any other one symptom of the disease; but such cases are very rare, and we are only justified in accepting them when they occur in connection with other cases distinctly pronounced. Besides, in this case, the abdominal symptoms peculiar to this disease all subsided in the course of the first week, whereas they should have become more marked. There are cases wherein a differential diagnosis of typhoid fever and tuberculosis is impossible, if we depend upon either the subjective or objective signs. I have seen some of the most glaring mistakes of this kind made by the best clinicians in the world. I have seen a diagnosis of typhoid fever tied to the big toe of a patient in the post mortem room when there was not a sign of disease in the abdomen, and where the smiles that arose on the faces of the pathologists were at the expense of the clinician. Every text-book will teach you that a diagnosis is sometimes impossible. There is not a symptom of either disease that may not be present in either. But how important it is to make a diagnosis, especially in these diseases, because a patient revives from one and dies from the other, in the rule.

In our day we have a means of making an absolute diagnosis, and we have made an absolute diagnosis in this case. We have arrived at it in the simplest possible way. We have examined the

sputa under the microscope, and found in it the bacillus tuberculosis which most emphatically and unmistakably stamps the disease. We have not been content to interrogate the outside of the body for the condition within. We have inquired of the messenger which comes from the seat of the disease, and we have received a definite response. You may examine and infer as much as you please, but you will never know definitely what kind of fluid is in the pleural sac until you put in the needle with the aspirator, and this you can do with a hypodermic syringe and determine the matter while your reflecting neighbor is rummaging the records of his experience, or is ruminating upon the uncertainties of our art. And you may study up all the books in an obstinate case of rheumatism for something to give the patient for a change, when it may occur to your successor at once to find some trichinæ as its cause. So have I seen a case of Bright's disease diagnosticated in the twinkling of an eye almost, by the introduction of a catheter into the bladder of a comatose patient who was regarded as an apoplectic; and many a case where a hypertrophied prostate was detected as the cause of dribbling of urine, and not a paralysis of the bladder, by the quickest and easiest kind of an examination. These things do not belong to this case, but they do belong to every-day practice, and they teach us when they happen to us that diagnoses are not made in the rule by long reflection, but they come for the most part like a flash. They come because we take the trouble to act. It is a reflection to our discredit that we did not diagnosticate this case by at least the end of the first week, when the typhoid symptoms proper disappeared; but it was looked upon as anomalous, and it was absolutely believed that it would prove abortive.

ATROPIA FOR EARACHE.—The most effectual treatment, and the one which has stood the test for years, says Dr. A. D. Williams in the *Chemist's and Druggist's Bulletin*, is the local application of a solution of the sulphate of atropia. Not a single case but has yielded at once. The solution is to be simply dropped into the painful ear and allowed to remain there from ten to fifteen minutes. Then it is made to run out by turning the head over, then being wiped with a dry rag. The solution may be warmed to prevent shock. From three to five drops should be used at a time. The strength of the solution must be varied according to age of the child. Under three years one grain to the ounce, and over 10 years, four grains to the ounce of water. In grown persons almost any strength may be used. All ages will bear a stronger solution in the ear than in the eye. The application should be repeated as often as may be necessary. Usually a few applications will stop the pain. In acute suppurative inflammation of the middle ear,

and acute inflammation of the external meatus, atropia will only slightly palliate the suffering, but in the recurring nocturnal ear-aches of children it is practically a specific.—*Medical Record*.

PUERPERAL FEVER.—In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowe, on "Puerperal Fever; its Treatment and Prevention," in which occurs the following judicious expression of views in regard to treatment:

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly-acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contra-indicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless; and yet these remedies have been vaunted and are actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I have indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulpho-carbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience; and I would strongly urge that all depressant remedies are both hurtful and dangerous."

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.—*Am. Med. Digest*.

LINEAR INCISION IN CANCER OF THE RECTUM.—At a recent meeting of the Société de Chirurgie de Paris, Dr. Trélat reported a case of extensive rectal cancer in a man fifty-six years of age, in which marked relief followed linear incision of the rectum. The patient was too weak to permit of an operation for artificial anus, so a longitudinal incision was made with the thermo-cautery through the posterior wall of the rectum. The man's condition improved at once, and his life was prolonged for eight months after the operation. In the discussion which followed this communication, Dr. Verneuil stated that he had practised this operation

many times with benefit. Le Dentu related five cases in which he had performed linear incision of the rectum in cancer with immediate relief of the pain and tenesmus. Desprès was opposed to the practice and preferred gradual dilatation.—*Bull. Soc. de Chirurg., Paris.*

AN EASY METHOD OF EXTIRPATING SMALL TUMORS AND ULCERS.—Dr. C. Johnston spoke of such a method, very simple, but affording extremely good results. Warts sometimes lead to malignant growths. These and other local affections, as ulcers and skin cancers, may require removal on account of their nature or because of the disfigurement they occasion. Here swiftness and certainty are needed. The knife is objectionable, because it makes a ragged edge and sometimes penetrates too deeply. Dr. J. employs a circular gun wad-cutter, of which there are various sizes. This acts as a trephine and makes a smooth, and clean circular incision. The margins can be approximated by silver-wire suture, or can be simply treated with carbolized oil and prepared cotton: the latter was most frequently employed by Dr. J. In performing the operation the cutting edge of the instrument is applied over the morbid growth and a half-turn of it is made, followed by another half turn. A tenaculum is now applied to the still attached button of tissue, which being lifted, is removed by one horizontal sweep of a knife. When upon the cheek a finger should be inserted into the mouth for the support of the tissues while the trephine is being used. The operation requires an anæsthetic, as chloroform, or bromide of ethyl as used by Dr. Chisholm, or local anæsthesia by ether or ice.—*Maryland Med. Journal.*

GELSEMINUM IN TETANUS.—Referring to Dr. J. B. Read's paper as to the use of the liquid extract of *Gelsemium sempervirens* in the treatment of tetanus I would make the following remarks: During the session of 1873-74 I communicated to the Liverpool Medical Institution a paper on the physiological action of that drug, and as the result of many observations and experiments, came to the conclusion "that the principal effects produced by large doses are extreme muscular relaxation without either stupor or delirium. In these respects," continues the paper, which was published in April 1875, "its action seems somewhat akin to that of *Conium maculatum*, and these effects would seem to point to its probable utility in tetanus and other disorders attended with severe muscular spasms."

During the following session. Dr. Spratly of Rock Ferry, honorary surgeon to the Birkenhead Borough Hospital, communicated to the Liverpool Medical Institution a report of several (I think three) cases of traumatic tetanus, which he successfully treated by means of gelseminum in the man-

ner indicated by Dr. Read, the doses of the drug, being very large, and the effect in each case eminently satisfactory. One of these cases, which, by Dr. Spratly's courtesy, I had an opportunity of seeing was very severe.—Dr. W. Carter, *Brit. Med. Journal.*

BANTING OUTDONE.—A somewhat novel plan of reducing corpulency to graceful dimensions has been devised by a German medical writer. The author, in a small pamphlet (*Corpulency and its Cure according to Physiological Principles*, by Dr. W. Ebstein, Wiesbaden, second edition, 1882), points out defects in the various treatments in vogue—Banting's and the mineral-water system. The curious thing, however, is his own method, which, he says, has the venerable authority of Hippocrates. In the author's opinion, corpulency is caused by too great a quantity of albuminoids and of sweets; and the cure is, to diminish these and to increase the quantity of fat in the food. He gives an example of the success of his dietetics. A healthy man, forty-four years of age, who, from his twenty-fifth year, had begun to grow very stout, owing to a sedentary life and to the dietetic use of an excess of alcohol, of albuminoids, and of sweets, lost twenty pounds in six months of following the prescribed diet. It may be added that, though the proportion of fatty matters was large, the diet altogether was little better than starvation fare.—*Brit. Med. Journal.*

SULPHO-CARBOLATE OF SODIUM IN VOMITING.—The use of the sulpho-carbolate of sodium, in flatulent dyspepsia is well known. It is not, perhaps, so generally known as a remedy for the vomiting of pregnancy. I have used it in this affection for years, and find it rarely fails to give some relief. I give it in doses of seven grains in half an ounce of water. Though sometimes decidedly useful in the vomiting of displaced or abnormal conditions of the uterus, it is less uniformly so than in pregnancy, probably because flatulence is a less constant factor in the former cases. Where deep nerve disturbance exists, we must trust to more powerful remedies, hypodermic morphia or atropine, or surgical procedures. The drug will, perhaps, be useful against sea-sickness, taken every two hours from the time of sailing. In one case—the only one tried—it appeared to have a good effect.—Philip Miall, in *Brit. Med. Journal.*

A NOVEL USE FOR PEPSIN.—Dr. Hollmann (*Nederland Weekblatt*, 18, p. 272), has used an aqueous solution of sixteen grains of pepsin as an injection into the bladder of a patient who had hæmaturia, and in whom a catheter failed to empty the bladder. A few hours later, a dark, viscid, fetid fluid readily escaped through the catheter.—*Medical Record.*

HYDROBROMATE OF IRON IN CHOREA.—A correspondent of the *Lancet* gives the following case: A patient, an anæmic badly nourished girl, aged fourteen, was frightened by a dog, and almost immediately afterwards developed choreiform movements. At the time of my visit, two days after the onset the child's contortions were painful to witness; her sleep was disturbed and it was with difficulty she could convey her food to her mouth. The heart sounds were normal, and there was no history of previous cardiac or rheumatic affections. After attending to her digestive organs, I prescribed syrup of hydrobromate of iron in twenty minim doses. The effect was very marked. The sedative action was speedily apparent, as the convulsive movements became gradually less severe, and the control of the muscles more readily recovered; whilst at the same time the anæmia was yielding to the accompanying iron. The continued use of the drug for about twenty days completely removed the affection.—*Med. and Surg. Reporter*.

THE TREATMENT OF ERYSIPELAS.—In the *Wiener Med. Presse*, Dr. Hastreiter recommends the treatment of erysipelas by painting with oil of turpentine, on the following grounds: 1. It can be used on the most sensitive patients, does not require any skill, and can be applied by the patient as often as may be necessary, and the irritation produced by excessive friction is avoided. During its application the eyes should be protected by a pad. 2. When employed frequently enough this method is perfectly safe and tends to produce a rapid cure. 3. Oil of turpentine can be procured everywhere. 4. All other dressings are unnecessary. 5. Internal antipyretic treatment is only rarely necessary; usually all that is necessary is to bathe the body with cold water, and make use of cold applications to the head. 6. The inhalation of the vapor of turpentine, can, perhaps, act as a preventive of the disease to the air-passages. 7. When employed at the outset of the disease it may abort the morbid process. 8. The oil of turpentine may also be employed in phlegmonous inflammation other than erysipelas.—*Med Record*.

THE ETHER SPRAY AN IMMEDIATE CURE FOR NEURALGIA.—Dr. McColgan extols the value of the ether or rhigolene spray for the instantaneous relief principally of facial neuralgia. He first had occasion to observe its good effects upon his own person, he having suffered greatly from facial neuralgia. Since curing himself, he has had occasion to test its efficacy in about twenty cases. The result was invariably a most gratifying success. In many instances a permanent cure was established. He attempts to explain its action by supposing a complete change to take place in the nutrition of the affected nerve, in consequence of the intense cold acting as a revulsive.—*Boston Journal of Chemistry*.

COUGH OF PHTHISIS.—Dr. Alonzo Clark, in a recent clinical lecture, published in the *Medical and Surgical Reporter*, gives a very useful point in controlling the cough of phthisis, or at least bringing it within bounds. He directs that two grains of the extract of opium, which has been dissolved before, be dissolved in three ounces of water, and if desirable, a small quantity of glycerine may be added. The solution is to be placed in an atomizer. The spray is to be inhaled seven or eight times in succession, and repeated if necessary.—*Chicago Med. Review*.

ANTI-ASTHMATIC MIXTURE.—The *Four. de Med. et de Chirurg. Prat.* says that M. Huchard, of the Hospital Tenon, employs the following, especially when the symptoms of bronchial catarrh are added to the attack of asthma:—

R	Iodide of potassium.....	
	Tincture of lobelia.....	
	Tinct. polygala, of each....	10 parts
	Extract thebaïc,.....	1-10 parts
	Distilled water.....	300 parts M.

A tablespoonful to be taken night and morning.

RESTORATION OF FROZEN PERSONS.—Some recent researches have very important bearing on the question of resuscitation of persons nearly moribund from freezing. Laptchinski (Knowledge) has made a series of very careful experiments upon dogs with the following results: "Of twenty animals treated by the method of gradual resuscitation in a cold room fourteen perished; of twenty placed at once in a warm apartment eight died; while of twenty immediately put into a hot bath all recovered."

HOW TO REMOVE FRECKLES.—D. J. V. Shoemaker, of Philadelphia, Pa., states that a careful application of a small piece of the ointment of the oleate of copper at night upon retiring will usually remove freckles. The oleate of copper ointment should be prepared by dissolving one drachm of the salt of oleate of copper in sufficient oleo-palmitic acid to make a soft ointment.

IN NERVOUS DEBILITY:—

R—Zinci Phosph.,.....	grs. 20-40
Acid Phosphor. dil.,.....	3 ss
Tr. Cinchon flav.,.....	3 vj
Aquæ Menth pip ad.,.....	3 viij

M. Sig. One sixth part three times a day.—*Med. Digest*.

"And Asa, in the thirty-ninth year of his reign, was diseased in his feet until the disease was exceedingly great; yet in his disease he sought not the Lord, but the physicians. And Asa slept with his fathers."—2 *Chronicles*, 16, 12.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batellere, Paris.

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The LANCET has the largest circulation of any Medical Journal in Canada.

OVERWORK AND UNDERWORK.

A few months ago Mr. Herbert Spencer, the philosopher and scientist, visited the United States, partly, at least, in quest of health and recreation. A living witness himself to the evils consequent upon overwork, he was probably in a frame of mind overly sensitive to impressions indicative of overwork on the part of the people amongst whom he sojourned. Be this as it may, certain it is that he deemed it right to sound a note of warning to the American people on this question before he took his departure. In a speech at Delmonico's, where he was dined by his admirers, he told Americans that they were overworked, and that in consequence, physical deterioration was clearly observable amongst them. An assertion more galling than this to the pride of a nation it would be difficult to conceive. Americans could stand to be told that they were an overworked people, but to be charged with physical degeneracy while believing themselves able to "whip all creation" is something past endurance. As might be expected, the English solon was told in a chorus reaching from the Atlantic to the Pacific that he was an ass, and did not know what he was talking about.

Fast on the heels of Mr. Spencer follows Mr. Seymour Haden, an English surgeon of some note, and the most famous etcher of his own times. He too has been feasted at Delmonico's. In his after-dinner speech he referred to Mr. Spencer's remarks. He flatly dissented from that gentleman's conclusions, and declared that the "energy" which he

found so much fault with was to him a source of much attraction, and could wish that they had a great deal more of it, on the other side of the Atlantic. Moreover, he declared that he "never had seen in all his professional career the least injury to life or health result from what Mr. Spencer calls overwork." To establish his position more firmly Mr. Haden adds, "I asked Sir William Gull if he had ever met with a case of mischief or injury from this cause, and he said he had not." For these generous words, Mr. Haden was praised as much as poor Mr. Spencer was abused. American manhood being thus vindicated, the sky is once more clear, and American "energies" move with unabated force in their wonted grooves.

Perhaps the most striking thing in this discussion is the wide divergence of opinion between these two observers. Mr. Spencer is convinced the American people are overworked—that they apply themselves too assiduously to business and the pursuit of wealth, and that in consequence of such intense application and continued strain, they are gradually undergoing a process of physical deterioration. On the other hand Mr. Haden has failed to discover any evidence of overwork. True, he has noticed remarkable "energy" in commercial and other pursuits, but of a kind so healthful in all respects, that he desires it to be transplanted to his own country. More remarkable still; he has never seen any ill effect consequent on overwork.

Mr. Spencer no doubt overshot the mark. He found himself amongst a people having distinctive physical qualities. He discovered that they had bodies cast in a somewhat different mould from that of a typical Englishman. It is evident he does not regard the new type an improvement on the old, since he speaks of it as a "deterioration." Seeking for the cause of this deterioration he fancied he had found it in overwork, it appearing to him that the whole people were intense toilers. A more absurd conclusion could hardly be imagined. In no country except our own, is food so abundant and labor so well rewarded. Living under circumstances so favorable to ease of both body and mind, the physical degeneracy of a people to any appreciable extent from overwork is simply an impossibility. In regard to the question of physical deterioration itself, there is perhaps more ground for Mr. Spencer to stand upon; at least the question may

have two sides. Deterioration, however, is a relative term, and to judge aright we require to have Mr. Spencer's standard of physical excellence. That standard no doubt is the English. But it should have occurred to him, that but few Americans are purely English or Anglo-Saxon stock. The Anglo-Saxon blood has been intermixed with Teutonic and other blood to an extent sufficient to produce distinctive mental and physical characteristics. To call contrasts *deterioration* is manifestly illogical and unjust. It may be that the article compared is better than the standard of comparison. In the present instance much that would be interesting might be said on both sides did space permit.

Equally unfortunate is Mr. Haden. That physician must be wanting in critical observation who has never met a case of ill health as the result of overwork. True, it has been said, that it is worry, and not work that kills. In a certain sense this is true, but what of the numerous instances in which worry, that is anxiety, is inseparable from the work? The truth is, every responsible position calling for the consistent exercise of mental rulings is a position of worry as well as work. In all the professions and in all callings imposing mental strain, are to be found individuals suffering from the effects of overwork, not in the United States only, but in all countries.

But what of the great army of underworked persons? In all rich countries are to be found two classes of men and women living in idleness. The first is the great horde of common vagabond idlers; the second, those who are cursed by lack of stimulus to labor, having enough and to spare. Are these free from bodily ailments, and are they physically the superiors of the overworked? Certainly not. As "the devil finds work for idle hands to do," so many of them fall into evil habits, contract disease and live out but half their days. The evils of overwork are but as a drop in the bucket compared with those following in the wake of underwork. In seeking for causes of physical deterioration, Mr. Spencer might have found in underwork a much more potent factor than overwork, not only in America but in all civilized countries.

Dr. Geo. Fox, the author of Fox's apparatus for fractured clavicle, died in Philadelphia on the 27th of December at the age of 77 years. He retired from practice 30 years ago.

HEALTH AND MORTUARY STATISTICS.

In pursuance of the resolutions adopted at Ottawa by the delegates from the various Boards of Health and municipalities in different parts of the Dominion, the Government has issued rules, regulations, and forms, for the collection of statistics of deaths and their causes. The rules are to apply to the following cities or towns, being the capitals of Canada and of the Provinces, and others having a population of 25,000 inhabitants or upwards, according to the census of 1880-81, Montreal, Toronto, Quebec, Halifax, Hamilton, Ottawa, St. John, N. B., Charlottetown, Winnipeg, Fredericton, and Victoria, B. C., to which neighboring localities may be added from time to time, or to such other cities, towns or localities or joint cities, towns, and localities whenever by experience it will appear that the system is satisfactorily worked and when sufficient means are granted by Parliament for that purpose. The rules are to be put into operation in each city whenever the Minister is satisfied of the existence of a local Board of Health to which is attached a permanent salaried medical officer, whether such "Board of Health" and "sanitary medical officer" are appointed and paid by the Corporation or by the Provincial Government; and on condition that the application of the system can be withdrawn for inability or negligence to carry it to such degree of accuracy as is necessary for the purpose intended. The Minister of Agriculture may make out of the Parliamentary grant an allotment equal to one cent for every individual unit of the population in favour of each of the cities to defray the expense of collecting mortuary statistics, to be paid by monthly instalments, or otherwise, and such allotment may be withdrawn in case of unsatisfactory working of the system. The Minister of Agriculture may, if he deems it necessary, add to such allotment for every one of the said citizens, a lump sum not to exceed four hundred dollars in any case, to assist the local authorities in procuring the necessary information of mortuary statistics. Pursuant to section 30th of "The Census and Statistics Act of 1879," the Governor-General in Council will, whenever one or more of the said cities have complied with the requirements hereinbefore stated, appoint the sanitary medical officer of the local Board of Health, a statistical officer for the collection of mortuary statis-

tics, from the local records, which appointment may be made to terminate for reason of unsatisfactory working of the system. The salary of the statistical officer shall consist of 25 per cent. of all the sums allotted to the city for which he is appointed. In case of epidemics or endemics, or in the case of contagious or infectious diseases threatening or breaking out, the Minister of Agriculture may cause special investigations to be made in any locality by any or several of the statistical officers, and regulate and defray out of the Parliamentary grant the cost of such investigations. The Minister of Agriculture may request the statistical officer to supplement the numerical returns by such statements and information as relate to the various medical and other questions relevant to the subject of accidents, crimes, diseases, and public health as causes of deaths reported by the mortuary statistics. Forms are also given, under which the information is to be collected, embracing under proper headings the class, order and name of the disease, age, sex, nativity, and religion of the deceased, also forms of death certificate to be filled up by physicians.

PROFESSIONAL RESPONSIBILITIES.

At the recent sitting of the Civil Assizes in this city an action was brought by a man named Isaac Lumb, against a medical practitioner of this city for having, as he alleged, been criminally intimate with his wife. The doctor had attended Mrs. Lumb in a miscarriage which took place on the 26th of last June, and the plaintiff alleged that the act was committed on the 19th of July following while the doctor was treating his wife in his professional capacity, and that she had confessed her guilt to him the same day of the occurrence. The plaintiff estimated the damages at \$2000 for the loss of his wife's society and companionship through the trouble, although she still lived with him and took care of her four children. The plaintiff based his case on the evidence of his wife who swore that the doctor took improper liberties with her, and the evidence of one of the children, a lad of ten years of age, who swore that he looked through the opening between the folding doors and saw the doctor leaning over his mother, and heard his mother say, "what will my husband say."

On the part of the defendant evidence was produced to show that the folding doors could not have been open at the time, in fact had not been open for months. The wife's evidence was also shown to be contradictory in many important particulars. Medical evidence was also produced to show the improbability that the defendant had connection with her at the time mentioned, twenty-three days after the miscarriage. Witnesses also testified that the character of the plaintiff and his wife was such that they would not believe them on their oath. The judge charged strongly in favor of the defendant and pointed out that owing to a recent change in the law the evidence of a woman could now be taken in such cases as these, which opened the floodgates to unlimited blackmailing. The jury after an absence of less than ten minutes, returned into court with a verdict for the defendant.

The universal impression left upon the minds of all who were cognizant of the particulars is, that it is a clear case of attempted blackmailing, and we are very much pleased to observe the prompt and emphatic verdict given by the jury in the case. No member of the profession, however careful he may be, can successfully guard himself against such trumped up charges, and it is therefore gratifying to find public opinion so pronounced against such disreputable tactics. The medical practitioner in this case deserves the thanks of the entire profession for the firm stand he took in defending the case, and he and they are to be congratulated upon the result. Many a medical man from fear of publicity, and possible damage to his reputation, even though the charge could be easily disproved, would shrink from the task, and would willingly pay a considerable sum as hush money. It is a very great hardship that respectable practitioners in the ordinary discharge of their duties should be at the mercy of designing scoundrels, and it is also a most iniquitous thing that they should be compelled to pay all the expenses of the court while their false accusers go scot free.

The medical practitioner in question has received by letter and telegram the hearty congratulations of friends both within and without the profession upon the determination with which he confronted his false accusers, and also upon the successful issue of the case.

NATURE OF PUERPERAL SEPTICÆMIA.—Prof. Chauveau, of Lyons, has been making experimental enquiry recently, into the nature of puerperal septicæmia. He believes with Masini and Ferrari that the infective agent is a vesicular body, pyriform and punctiform, constantly found in the blood of patients suffering from the disease, and is capable of reproduction in animals by inoculation, also that these organisms are common to all forms of septicæmia. Rabbits have been employed by Chauveau in his experiments, and he has succeeded by inoculation of the virus in producing every degree of puerperal septicæmia. If injected into the peritoneum, peritonitis is always present with much effusion, and death usually occurs in five or six days after inoculation. The effusion contains large numbers of the special micrococcus. A most curious fact was observed in the case of three rabbits which had recovered from the effects of inoculation. They acquired a perfect protection from the disease, had undergone as it were, a septicæmic vaccination and could not be successfully re-inoculated. Chauveau is now endeavoring to obtain a benign virus by Toussaint's method of attenuation by the action of heat, which might confer immunity without causing a dangerous illness.

MALARIA IN SKIN DISEASES.—In a paragraph in our Nov'r issue, copied from the *Michigan Med. News*, Dr. L. P. Yandell, of Louisville, is made to say that *all skin eruptions are due to malaria*. The Dr. sends us the following correction:—"From the criticisms which have been made on my views, I find that I have not succeeded in making myself perfectly understood. What I have contended for, and what I have reiterated, is simply this: Malaria is *the chief source* of acute skin disease. Scrofula is *the chief source* of chronic skin disease. The more inveterate cases of skin disease are often due to the co-existence of these two things. *I do not claim* that malaria and struma are the *sole* causes of the dermatoses. Indeed, *many* of the dermatoses may exist *independently of malaria or struma*, and most frequently some exciting cause is necessary to develop the cutaneous eruption. The proofs of the truth of my views are, in the first place, that the diseases of the skin are cured more certainly and more quickly by the anti-malarial remedies on the one hand, and by the anti-strumous on the other,

than can be done by any other line of therapeutics; and in the second place, that careful and painstaking investigation will, in the majority of dermatoses, make apparent the existence of the malaria or the struma, as the case may be.

CITY BOARD OF HEALTH.—It is a universal practice in cities of any pretensions whatever, to have on the health board a medical health officer. At one time Toronto had two such, one for the east and one for the west; now it has none, nor has it had any for many years past. Toronto has more medical practitioners in proportion to its population than any city we know of. The people support in a fairly liberal manner about 150 physicians to look after them when they get sick, from the many causes of disease which prevail in the city, and pay probably \$300,000 per annum to the doctors alone, to say nothing of nurses and other expenses, but not a dollar for the prevention of sickness. We fail to see the wisdom of the management of the health department in our city governmental affairs. It is not that we, or the doctors, should complain of this anomalous state of things; but we feel it to be our duty to endeavor to draw public attention to the facts. Much serious sickness and affliction could doubtless be prevented by an experienced, efficient, and well-paid medical health officer.

THE KINGSTON EMBROGLIO.—The *Canada Medical Record*, the Journal conducted by professors of Bishop's Medical College, has the following anent the recent trouble in the Kingston school. "The male students insisted that females should not be taught with them. The Faculty resisted the demand. The male students were equally determined and decided to leave the school in a body if their request was not granted. They telegraphed their situation to all the other Medical schools in Canada, some of which offered favorable terms. This brought the Faculty to a full realization of their position, and the flank movement of the students was successful. * * * Capital is being made of the fact that one school insisted upon the students at Kingston having their three months attendance certified before accepting them. This of course was simply refusing them, and Kingston has a right to feel grateful, but that does not prove that the other schools did wrong.

We believe each school knows best how to conduct its own business, and acted accordingly. It was this action which brought the Kingston Faculty to terms, and perhaps in the long run it may turn out that after all they caused the Royal College of Physicians and Surgeons to act in a way that will redound to their best advantage."

TRINITY MEDICAL COLLEGE.—The increasing attendance of students in Trinity Medical College has rendered imperative the building of another wing to the new lecture hall and dissecting room. The work will commence immediately after the close of the present winter session. 201 students have registered their names in the Faculty of medicine during the present session, and it is confidently expected that this number will be greatly increased next session. This is the largest attendance in the history of the college and the largest of any medical school in Canada either past or present.

Shortly before the Christmas holidays Professor Kirkland, delivered a lecture to the students on "The Story of the World." The lecture was highly appreciated, and at its close the students presented the lecturer with a handsome and costly gold-headed cane. The address was read by Mr. Fere, and the presentation made by Mr. H. S. Bingham in behalf of the students. Mr. Kirkland made a suitable reply, and the proceedings closed by the students singing "Old Trinity is a Jolly Home."

APPOINTMENTS.—The following gentlemen have been appointed Examiners in Medicine, Toronto University—Physiology and Pathology—George Wilkins, M.D. Medicine and Therapeutics—F. R. Eccles, M.D. Midwifery and Forensic Medicine—D. B. Fraser, M.B. Anatomy—M. H. Aikins, B.A., M.D. Surgery and Surgical Anatomy—F. L. Grasett, M.B. Clinical Medicine and Clinical Surgery—C. O'Reilly, M.D. Hygiene and Medical Psychology—C. W. Covernton, M.D. Chemistry—W. H. Ellis, M.A., M.B. Biology—H. Montgomery, M.A.

The following have been appointed examiners in Medicine in the University of Trinity College: Geo. T. McKeough, M.D., Cnatham—Surgery and Botany. Wm. T. Harris, M.D., Brantford—Midwifery and Medical Jurisprudence. W. T. Stuart, M.D.—Chemistry. C. Sheard, M.D.—Anatomy

and Physiology. C. W. Covernton, M.D.—Medicine and Materia Medica.

Dr. W. H. Howey, of Delhi, has been appointed assistant surgeon on the eastern division of the Canada Pacific Railway.

Dr. R. Whiteford has been appointed Prof. of Physical Diagnosis and Diseases of the chest in the Toledo Medical College.

Prof. Burdon Sanderson, of University College, London, has been elected to the Waynflete chair of Physiology at Oxford.

BATHURST AND RIDEAU MEDICAL ASSOCIATION. A meeting of the Bathurst and Rideau Medical Association was held in Ottawa, on the 18th ult. The attendance of members was large, and after a lengthy discussion a resolution thanking the Ontario Government for important measures recently adopted by them in relation to public health was unanimously adopted. The President, Dr. Cranston, Arnprior, delivered the opening address, and papers were read by Dr. Cranston, on "*Fractures*," Dr. Grant on "*Effusions in Pleura*," Dr. Horsey on "*Counter Irritation*," and Dr. Baird on "*Hematuria*." Lengthy discussions followed each paper. In the evening the city physicians entertained their visiting brethren at dinner in the Royal Exchange. The following are the officers of the association: President—Dr. Cranston, Arnprior. Vice-Presidents—Drs. Horsey, Ottawa, and Burns, Almonte; Treasurer—Dr. Hill, Ottawa; Secretary—Dr. Small, Ottawa; Council—Drs. Baird, Pakenham; Groves, Carp; Dickson, Pembroke; Preston, Carleton Place; Lynch, Almonte; McCallum, Smith's Falls; Sweetland, Grant and H. P. Wright, Ottawa.

THE UNITED STATES DISPENSATORY.—We are pleased to announce that the fifteenth edition of this famous American medical work will be ready this month. The editors are Dr. H. C. Wood, Professor of Materia Medica and Therapeutics in the University of Pennsylvania, Joseph P. Remington, Professor of Pharmacy, and Samuel P. Saddler, Professor of Chemistry, in the College of Pharmacy of Philadelphia. The revision has occupied about three years, and has been in all respects most thorough and complete, embracing the most recent discoveries in Materia Medica, Pharmacy, Chemistry and Therapeutics.

The relation of the work to the United States Pharmacopœia will be fully maintained, whilst the encyclopædic character of the Dispensatory will be developed to the greatest extent. The new Pharmacopœia will be in all its parts fully expounded and discussed, and the most recent non-official medicines, as well as those long out of date, will be carefully considered in the second part of the work.

PREVENTION OF BLINDNESS.—The fifth International Congress of Hygiene, which will meet in Hague, Holland, in 1884, will award the prize of two thousand francs (£80 sterling), offered by the London Society for the prevention of blindness, to the author of the best essay on "the causes of blindness and the practical means of preventing it." Besides this prize, the International Society for the improvement of the condition of the blind, reserves to itself the right to award a second prize of one thousand francs, or two prizes of five hundred francs each, and a medal with a diploma, to such of the essays as shall be deserving of it. The essays are to be sent to Dr. Haltenhoff, Geneva, not later than the 31st of March, 1884, each bearing a motto, and the name and address of the author to be enclosed in a sealed envelope.

JOURNALISTIC CHANGES.—The *Michigan Medical News* and the *Detroit Clinic* have been consolidated, and the new journal is called "*The Medical Age*." The *Canadian Journal of Medical Science* has dropped its high sounding title and has been re-christened the *Canadian Practitioner*. The *American Medical Bi-Weekly* has become a weekly. The *N. Y. Medical Journal* has also become a weekly, and both the latter, and the *Medical Record* of New York have greatly enlarged the size of their pages. We cannot say that we fully appreciate this change. If it is well to lengthen the pages to a foot or more, why not make them two feet, so that when bound up the volumes may stand on the floor, for no ordinary book-shelf will accommodate them.

CANADIAN VOLUNTEER SURGEONS.—During the engagement of the British forces in Egypt, Dr. J. Wishart, of London, Ont., and Dr. D. B. Fraser, of Stratford, (Graduates of Trinity Medical College,) offered their services to the British Govern-

ment, as army surgeons. The following reply was received through the Acting Governor-General.

To the Deputy Governor-General of Canada :

SIR,—I have received a letter from Drs. Wisart & Fraser, of Canada, offering their services with the medical staff doing duty in Egypt. The Secretary of State for War, to whom the letter was referred, desires that these gentlemen may be thanked for their offer, and informed that there will be no opportunity of utilizing their services.

I have, etc.,

(Signed), KIMBERLEY.

DEFECTIVE VITAL STATISTICS.—At the recent meeting of the public health delegates at Ottawa, Dr. Playter drew attention to the fact, that the interments in the cemeteries in and around Toronto, showed that there were, during the months of September, October and November, of this year, 39 more deaths in Toronto than were recorded with the City Registrar. There is evidently something faulty either in the system or in the manner in which it is worked. It has now been in operation over thirteen years, long enough to have had a fair trial.

REMOVALS.—Dr. Jas. Cassels has removed from Three Rivers to Upper Bedford, Que. Dr. H. E. Poole has removed to Ormstown, Que. Dr. K. A. J. McKenzie has removed to Portland, Oregon. Dr. H. V. Ogden has removed to Milwaukee, Wis. Dr. J. C. Shanks has removed to Howick, Que. Dr. H. E. Heyd, formerly of Brantford, has removed to Buffalo. Dr. F. H. Mitchell has commenced practice in Winnipeg. Dr. J. C. Moody, of Richibucto has removed to Windsor, N. S. Dr. F. Hoyl (Kingston) is practicing in Ada, Minnesota. Dr. M. Forster has removed from Acton to Palmerston, Ont.

REMOVAL OF THE GALL-BLADDER.—Prof. Langenbeck of Berlin, (*Klin Wochen*) has recently removed the gall-bladder for the relief of a chronic case of gall stones. An incision was made along the outer border of the right rectus muscle and another at right angles to it, corresponding with the inferior border of the liver. The abdomen was opened, a ligature put on the cystic duct and the gall bladder dissected out. The patient made an uninterrupted recovery.

NEW TREATMENT OF FIBROIDS OF THE UTERUS.

—Mr. Knowsley Thornton, of the Samaritan Hospital, London, Eng., has successfully ligated the uterine and ovarian arteries in cases of fibroids of the uterus. The results are reported to have been excellent, and promise completely to supplant hysterectomy. We are reminded that Dr. Cattermole of London, Ont. suggested this operation in certain forms of utero-ovarian tumors in the CANADA LANCET for Nov. 1880. It is somewhat gratifying to learn that a suggestion emanating from one of our distinguished Canadian confrères has been successfully carried into effect.

PRESENTATION.—Dr. Coventry was the recipient a few evenings ago of a very flattering address, a beautiful silver tea service, and a purse of \$450 in gold, from the good people of Windsor Ont., as a token of their appreciation of his public services as Mayor during the past three years. The Dr. acknowledged the compliment in appropriate terms. We congratulate him upon the event, and the kind and appreciative regard in which he is held by his fellow-townsmen,

BISHOP'S MEDICAL COLLEGE ANNUAL DINNER.

—The students of Bishop's Medical College held their second annual dinner at the Windsor Hotel, Montreal, on the 13th of December. Both this dinner and the one held on the 18th of the same month by McGill College, like those in Toronto, were conducted on strictly temperance principles. The dinner was in every sense an unqualified success. Besides students, graduates, professors, and representatives of other colleges, the Consul-General of the United States, and many prominent citizens were present.

ONTARIO BOARD OF HEALTH.—We are pleased to notice that the Provincial Government has placed the sum of \$4,400 in the estimates for the salaries and expenses of the Board of Health. This will enable the Government not only to increase the salary of the Secretary so as to permit him to devote his whole time to sanitary work; but also to give a *per diem* allowance to the members of the Board.

PETERBORO' WATER WORKS.—The system of Waterworks just completed by the Waterworks Co. in the enterprising town of Peterboro' has

been tested and promises complete success. Dr. R. A. Boucher has taken an active interest in securing an abundant supply of good water for the people of this town, and he is to be congratulated, and also the inhabitants of Peterboro' on the success of their undertaking.

HORSFORD'S ACID PHOSPHATE IN NIGHT SWEATS.

—Dr. J. J. Douglass, of Hampton, Nebr., says: He has used Horsford's acid phosphate extensively in his practice and it gives almost universal satisfaction. He recommends it in the first stages of consumption, night sweats, prostration from overwork, wakefulness, nervous exhaustion, alcoholism, sick headache, loss of appetite, and constipation.

The following medical gentlemen have been appointed commissioners under the license act of 1876: Jas. S. Sprague, M.D., and John S. Loomis, M.D., Hastings, (N. R.); A. Rockwell, M.D., Hastings, (W. R.); L. Harvey, M.D., Lambton, (E. R.); A. McLean, M.D., Lambton, (W. R.); J. Gunn, M.D., Middlesex, (N. R.); C. M. Gould, M.D., Northumberland, (E. R.); W. McGill, M.D., Ontario, (S. R.); and W. H. Blackstock, M.D., Simcoe, (E. R.); R. Douglass, M.D., Bruce (N. R.); A. Robillard, M.D., Ottawa.

BRITISH DIPLOMAS.—Dr. M. L. Cameron, of Chatham, has recently returned from Edinburgh where he has been pursuing his medical studies for some time past. He has received the L. R. C. P. and S. Edin. W. C. Cousins, M. D., of Montreal, has received the double qualification, L. R. C. P. and S. Edin.

PARLIAMENTARY.—We are pleased to observe that the following medical gentlemen have been re-nominated as candidates for the Ontario Legislature viz: Drs. Widdifield, Robertson and Cascaden. It is also rumoured that Dr. McMillan, of Alexandria, Ont., and Dr. Louis Robitaille, of New Carlisle, Que., have been called to the Senate of the Dominion of Canada.

CORONER.—P. A. McDonald M. D. has been appointed Coroner for the Co. of Inverness, N. S., and also Health Officer for Port Hawkesbury, Nova Scotia.

The death of Dr. Geo. M. Beard, of New York, of pleuro-pneumonia aged 44 years is announced.

Books and Pamphlets.

"THE POPULAR SCIENCE MONTHLY" for January, 1883. New York; D. Appleton & Co. Fifty cents per number, \$5 per year.

This popular monthly offers a goodly number of articles which merit attention for their interesting practical character. The opening article is on "The Great Comet of 1882," by Professor Young, of Princeton, who discusses the subject from a scientific point of view. "Scientific Philanthropy," by M. Fouillée, is discussed in the light of the views of the Darwinian school of philosophy. Dr. C. C. Abbott's "Traces of a Pre-Indian People" is another interesting subject. Dr. Robert's "Bodily Deformities in Girlhood" commends itself by its very title to parents and teachers. Dr. Felix I. Oswald writes on the "Curiosities of Superstition." Herbert Spencer's speech, at the farewell banquet given him on the 9th November, is published under the title of "The Gospel of Recreation." This number also contains the portrait and sketch of the late Dr. Henry Draper.

A PRACTICAL TREATISE ON THE APPLICATIONS OF ELECTRICITY TO MEDICINE AND SURGERY; By Roberts Bartholow, A.M., M.D., LL.D. Second edition, enlarged and improved, with 109 illustrations. Philadelphia: H. C. Lea's, Son & Co. Toronto: Ure & Co. Price, \$2.50.

It is only a short time since we reviewed the first edition of this work. The fact that another edition is already demanded shows that the work was appreciated by those for whom it was intended. The author states in the first edition that the work was an exposition of electricity for remedial purposes made by a medical practitioner, for the use of other medical practitioners—in other words to prepare a work from the practitioner's, rather than the merely scientific, standpoint. The same conception is paramount in the present edition, but the author has developed more fully the modern methods of ascertaining and expressing current strength, tension, resistance, etc. He has made many additions and improvements in the work, which has enlarged it by the addition of about 30 pages. The author is too well known to require any recommendation at our hands.

MEDICAL CHARTS.—Complete epitome of skin diseases, and chart of poisons. By J. E. Sanborn, M.D., Rockford, Mass.

The author has compiled for the use of physicians, two very useful publications, in the form of medical charts; one, a complete epitome of skin diseases, based upon the most approved classification. It is neatly printed on a single sheet, (22 by 28 inches) and gives at one view the symptoms, varieties, causes, diagnosis, prognosis and treatment of every skin disease, carefully compiled from the best authors, and brought up to the latest times; adapted both for speedy reference and permanent use. It is, in fact, a condensed treatise on skin diseases. Price 35 cents. The chart of poisons, gives in tabular form the symptoms of all poisons, with antidotes, and full treatment. Price 25 cents, or both charts 50 cents.

The "CANADIAN ILLUSTRATED NEWS," published by G. B. Burland, Montreal.

The number for January appears with a new heading and much improved in form. The paper and letter press are good, and the illustrations very interesting and well executed. It contains an interesting variety of well written articles and stories, and deserves the hearty support of the reading public of Canada. We earnestly commend it to the attention of our readers.

Births, Marriages and Deaths.

On the 6th of December 1882, by the Rev. C. Watson. G. L. Milne, M. D., C. M., to Ellen Kinsman, daughter of John Kinsman Esq., all of Victoria, B. C.

At Shakespeare on the 27th of Dec. 1882, W. T. Parke M. D. of Milverton Ont., to Miss Kate Fraser, daughter of the late Alex. Fraser of North East Hope.

At Picton, N. S., on the 20th of December, Thomas R. Fraser, M. D., late of Halifax, in his 74th year.

On the 31st of December, Dr. Robt. Thomson, of St. Stephen, N. B.

In Winnipeg Man., on the 30th of December, 1882, Dr. Duncan McGregor formerly of Chatsworth, Ont.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

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CRITICISM AND NEWS.

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Original Communications.

A NEW MEDICAL BATTERY.

BY A. M. ROSEBRUGH, M.D., TORONTO, ONT.

About two years ago I read a paper before the Toronto Medical Society on the construction of galvanic and faradic batteries, which paper was subsequently published in the *Canada Lancet*. Since then a new departure has been made in the construction of portable galvanic and portable faradic batteries, as well as in the instruments where the two are combined. But perfection has not yet been attained; the model battery has yet to be produced. Medical batteries, though highly finished—even ornamental—are still too complicated and too difficult to be kept in working order, and withal too expensive, to become popular with the profession. We are not all practical electricians, and we require a battery that is simple in its construction, almost automatic in its action, and easily kept in order. As a contribution to this end, I propose to describe a modification of the portable galvano-faradic battery which I have recently adopted with advantage, and to which I wish to call the attention of the profession.

These improvements are two-fold—

- 1st. In the method of securing the necessary pressure on the hydrostat plate or plates.
- 2nd. In the method of putting the battery into action and out of action.

This battery was made for me in Toronto, and is a modification of the battery invented by Dr. McIntosh, of Chicago. In the McIntosh battery the horizontal plate to which the elements are attached is padded on the under side to form a hydrostat plate, one-half of which is used to cover the acid-cells when the battery is not in action, while the elements, attached to the remaining half,

are suspended in a drip-cup by the side of said acid-cells. The end of each hydrostat plate is pressed down upon the cells by means of spring bolts and clamping screws. This latter arrangement is quite effective but very inconvenient, as much time is spent in clamping and unclamping the plates—not merely when the battery is taken to the bedside of the patient, but also of necessity whenever the battery is used. In the new battery the pressure upon the hydrostat plates is made automatic by simply placing bearings upon the lid of the battery case. When the lid is closed the acid-cells are firmly covered, and when the lid is open the bearings are removed and the plates may be moved without loss of time. Again, in the McIntosh battery, when the apparatus is used each hydrostat plate (with the elements attached) is raised from the drip-cup, rotated upon its horizontal axis, and the elements immersed in the acid solution. When the *séance* is ended, each hydrostat plate is lifted from the fluid, and, before it can be replaced in the drip-cup, must again be rotated upon its horizontal axis. This manipulation is not specially inconvenient, but unfortunately the dripping of the acid solution from the zinc and carbon elements commences before the horizontal rotation is completed, and, unless very special care is taken, the metal parts on contiguous plates are liable to become spattered. This is obviated by the expedient illustrated in the accompanying figures.

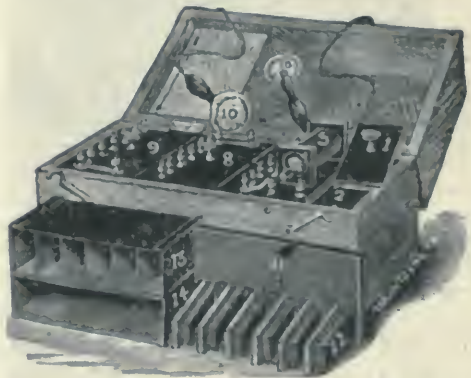


FIG. 1.—The elements at rest. 7, 8, 9. The three hydrostat plates in position. 2 The extra space to the right for overlapping of the first hydrostat plate (containing the induction coil.)

Fig. 1 represents the position of the hydrostat plates of an eighteen-cell combined galvano-faradic battery when the elements are at rest. The elements from 1 to 18 are resting in the drip-cups, six

pairs being attached to each of the four hydrostat plates, and on the left hand side thereof. The overlapping part of each hydrostat plate covers the top of six acid cells, which latter are to the right of each drip cup. In the McIntosh battery the elements of any one series, as from 7 to 12, can be immersed in two ways: first, by lifting and then rotating on the horizontal axis, and second by allowing the projecting hydrostat plate to override the screw-cup, on the adjoining plate to the right (1 to 6). Both methods are objectionable, the latter obviously so, and the former for reasons already named.

In the apparatus as modified by me the battery-case is elongated to the right, to the extent of half the width of a hydrostat plate, so as to provide a space for overlapping to that extent. When the elements of the first series (1 to 6) are immersed, space is left for the overlapping of the hydrostat plate of the second series, which, in turn, makes way for the third, and so on. When the third series of elements are immersed, the end drip-cup to the left is left uncovered. This may be covered by the narrow plate or cover removed from the right, as represented in Fig. 2.

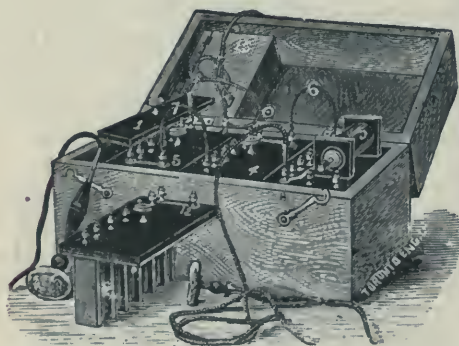


FIG. 2.—The elements immersed. 6. Spring-wire connecting the 1st and 2nd series of elements. 7. Spring-wire connecting 2nd and 3rd series. 1. The cover for the space left to the left of the case when the elements are immersed.

The screw-cups 6 and 6½ of the first and second series, and 12 and 12½ of the second and third series, are connected by a spring or wire, this connection being facilitated by the supplemental posts 6½ and 12½. The positive electrode is connected with No. 1, and the negative with No. 18. The cord of the negative electrode is bifurcated, so that, by a step by step arrangement, the number of

elements in circuit may be increased or diminished gradually without breaking the circuit.

By these modifications the battery is ready for use as soon as the lid is open. The elements may be displaced to the right and back again to the left without loss of time and without being rotated; and, moreover, in the original battery, any one of the zinc or carbon plates may be easily removed, repaired, or replaced without the help of an electrician.

To sum up, the advantages claimed for the new battery are as follows: 1, cleanliness; 2, economy of time; 3, simplicity in management; 4, simplicity of construction.

BRIEF DIRECTIONS FOR OPERATING THE BATTERY.

The Acid Solution.—Bisulphate of mercury 3iv.; bicromate of potash (pulverized) 3iii.; sulphuric acid (pure) 3iv.; water 3xxx. It should stand two or three hours to cool, before using. The cells should be filled a little more than half full. The mercury bi-sulphate keeps the zinc plates amalgamated, and prevents them from corroding. After using the battery, say 12 or 15 times, a little fresh battery solution may be added, but the cells should not be filled more than two-thirds full; it is well to keep a supply of the solution ready prepared. After using the faradic current 8 or 10 times the weakened solution may be withdrawn from No. 1 cell, with a syringe, and a fresh solution substituted.

The Hydrostat.—The battery is constructed so that when the case is closed and locked, pressure is exerted upon the soft rubber hydrostat pad (14 Fig 1,) and the acid solution is kept from spilling. The top of the cells should be perfectly even, and nothing should be allowed to accumulate on top or underneath them, or on the bottom of the box. In case of a long journey it is well to make the hydrostat doubly secure by increasing the pressure. This can be done by inserting 1, 2, or more thicknesses of blotting paper under the cells on the bottom of the box. Special care should be taken that the empty or drip cells (14) do not stand higher than the cells containing the acid solution, (13,) they might be a trifle lower. Moist sponges should be kept outside the case and the case should always be kept in an upright position.

To Test the Strength.—When the solution is fresh any single cell will cause the spring of the

induction coil to vibrate when it is connected with the primary coil at B and P (below No. 1). Simply connecting B with No. 1 post by the wire coil, will test the strength of No. 1 cell, and connecting B with No. 2 post will give the strength of No. 1 and No. 2 together. To test the strength of No. 2 cell separately, the two covered electrode cords are used; one is inserted in B post and the other in P (below No. 1 post), one of the tips of the free ends is inserted in No. 1 post and the other in No. 2 post. By removing the tip from No. 1 post and inserting in No. 3 post—No. 3 cell is tested, and so on. If the second series of plates (7 to 12) are immersed in the acid solution the individual



FIG. 3. The faradic coil. B the battery post for one end of spring wire. The other end of wire is inserted in 1 or 2 post. S, the posts for the secondary or induced current.

cells may be tested in the same manner. No. 8 cell is tested by inserting one of the free tips in No. 7 post and the other in No. 8, and so on. To prevent confusion in this test, it is well to have one of the branches of the bifurcated cord eliminated, as for instance, by tying it up in a knot.

After the cells have been used 10 or 12 times for 10 or 15 minutes at a time, the strength will be reduced so that it may require the current from two cells to operate the vibrator. When the strength of the solution is so reduced that two or 3 cells will not affect the induction coil, the battery should be charged with a fresh solution. A weak solution cannot be depended upon. The point of the screw should just touch the platinum projection on the vibrator, and the hammer on the end of the vibrator should stand about $\frac{1}{4}$ of an inch from the end of the core of the induction coil. It is sometimes necessary to start the vibrator with the finger. The elements should not remain in the solution longer than necessary. After being used they should be rinsed, but they should not remain long in water. The drip cups should be emptied occasionally.

In testing the strength of the faradic current it is sufficient to connect the cords [to N and P (secondary)] and take a moistened electrode in each hand. The strength of the faradic current is increased by withdrawing the tube from the core of the induction coil, (and between the two secondary posts N. and P.)

The strength of the galvanic current (constant current) is roughly tested by applying the two electrodes to the forehead an inch or two apart. Six cells should cause a burning sensation, and a flash of light when one electrode is removed. A galvanometer is more accurate.

The weakest faradic or induced current is derived from P.¹P.²N.³—the strong from N.⁴P.⁵

THE NEW YORK MEDICAL CODE.—The members of the State Medical Society at Albany, by a vote of 105 to 99 have approved the new code of ethics by which allopathic physicians are allowed to consult with any legally qualified practitioner. The closeness of the vote, however, indicates how strong a feeling exists against the change among the conservative members of the profession; but when the new code has been in force longer, its opponents probably will be more reconciled to it.

NOTES OF A CASE OF SEVERE RAILWAY INJURY.

BY J. F. MACDONALD, M. D., HOPEWELL, N. S.

(Reported by Mr. I. M. Maclean)

On the ninth of August last, C. B., æt. 58, while employed with his fellow workmen on the Railroad track, was struck down by an approaching engine, the wheels of which passed over his left leg above the ankle, so severely lacerating the soft parts and crushing the bones as to necessitate amputation three inches below the knee. Some projecting part of the engine entered the perineum, severed the sphincter ani, injured the os pubis and, making its way to the bladder, produced a ragged wound in the neck of that viscus, of fully an inch in length, through which the urine constantly found an exit.

The amputation was performed as soon as possible after the accident, and the perineal wound thoroughly cleansed and dressed anti-septically. Owing to the peculiar situation and the severity of the perineal wound, the introduction of a catheter

was found to be impracticable for the first five or six days, and, as a consequence, the continuous dribbling of urine rendered a very frequent renewal of the dressing necessary. Even after the successful passing of the instrument, the flow of urine did not entirely cease, this being sufficiently accounted for, by the size of the laceration in the neck of the bladder and by the frequent plugging of the catheter with mucus, &c., which prevented its being retained for any great length of time. The instrument required to be changed very often. The perineal wound at each dressing, and the bladder (*per cath.*) once or twice daily, were well washed out with carbolic acid lotion.

The great difficulty experienced in keeping the patient dry and clean, the presence of some severe bedsores which the greatest care did not succeed in preventing, and the trying influence of the hot summer weather aggravated in no small degree, the condition of matters for the first few weeks.

Aug. 9th.—11 p. m. (the night after the accident). Pulse 89, temp. normal. Skin moist. Aug. 11th.—Morning—Pulse 80, temp. 100°. Evening—pulse 92, temp. 100-4°. Aug. 12th.—Morning—pulse 75, temp. 100°. Evening—pulse 92, temp. 99°. Aug. 13.—Morning—pulse 76, temp. 100-5°. Evening—pulse 78, temp. 99°.

Aug. 15th.—Catheter passed and temporarily retained. Pulse and temp. normal. Hot weather oppressive and patient manifests considerable uneasiness and distress. Perineal wound painful.

Aug. 19th.—Morning—pulse 65, temp. 99-8°. Evening—pulse 72, temp. 100-8°. General condition good.

Aug. 20th.—Pulse and temp. normal. The painful condition of the perineum, the necessity of frequent dressings, the warm weather and presence of some bed sores, interfere with rest at night, necessitating, occasionally, hypodermic injections of morphia, or sleeping draughts.

Aug. 21st.—A drowsy or semi-comatose condition all afternoon.

Aug. 22nd.—Morning—drowsy condition passed away. Patient doing well. Pulse and temp. normal. In the evening, a good deal of fever. Pulse 90 and temp. 102-5°. No rigors.

Aug. 23rd.—Morning—Fever gone. Pulse and temp. normal. Evening—slightly febrile. Pulse 84 and temp. 100°. Stump doing so far well. It and the perineal wound are being regularly dressed with carbolized oil.

Aug. 24th.—Morning—pulse 82, temp. 100-4°; scrotum, &c., considerably œdematous. A quantity of fluid evacuated by incision. Evening—pulse and temp. normal. Aug. 25th.—General condition good.

Aug. 26th.—Seventen days after the accident, the stump having firmly healed, except where the ligatures protruded, secondary hemorrhage occurred, which was controlled by compression and cold applications.

Aug. 27th.—Evening—pulse 82, temp. 100-4°. Stump discharging a large quantity of purulent matter mixed with blood clot, odor offensive. Daily syringing of the stump with carbolic lotion. Urine flowing *per cath.* Very little through wound.

Aug. 29th.—Patient doing well. Considerable discharge from stump and perineum. Ligatures have all come away.

Aug. 31st.—Stump has healed firmly with the exception of one opening to admit of drainage. A few drops of urine *per viâ nat.* without aid of catheter.

Sept. 1st.—Some fever last night. Slight delirium. Sleepy and semi-comatose all afternoon. Evening—pulse 82, temp. 100-4°. Very restless.

Sept. 3rd.—Small quantity of urine *per via nat.* Patient now able to sit on a chair for a short time daily.

Sept. 5th.—Urine again coming through the wound. In the evening severe chills followed by slight fever.

Sept. 6th.—Morning—pulse 93, temp. 102-8°. Evening—condition improved. Pulse 79, temp. 99-8°. No symptoms of pyæmia. No recurrence of last evening's chill. Passed two or three cups of urine *per via nat.* None from the wound.

Sept. 8th.—Sleepy and drowsy. Stump still discharging. On examination, the end of the tibia was found slightly necrosed.

Sept. 9th.—Urine flowing through the wound. Purulent discharge from stump continuing. Stimulating injections applied two or three times daily to the end of the bone. Patient still in a drowsy condition.

Sept. 10th.—Chilliness complained of. No definite rigor. Drowsiness passing off.

Sept. 11th.—Some urine still dribbling from wound. Pulse and temp. normal.

Sept. 17th.—Urine has ceased coming through the wound. Stump doing well. No trouble from the bone.

Sept. 19th.—Stump completely healed. The perineal wound progressing favorably but slowly.

Sept. 29th.—Catheter permanently removed. No more urine coming through the wound.

Oct. 9th.—An abscess, which formed behind the scrotum, was opened.

Oct. 25th.—Perineal wound re-opened, and, on examination, the os pubis was found necrosed at the part where it had been injured. This portion of the bone was found completely divested of periosteum. There was a considerable discharge of thin watery pus, and several pieces of bone came away, one of which, although thin, was as large as the nail of the little finger. The abscess in the groin was found to be in connection with the necrosed piece of bone. The fluid injected through the opening in the abscess made its way out by the perineal wound and *vice versa*.

Jan'y. 23rd.—The patient has been slowly but steadily improving; the abscess in the groin has healed; the perineal wound and the part of the os pubis which had necrosed give no further trouble and he is now almost well.

ON CONTAGIOUS PNEUMONIA.

BY G. E. COULTHARD, M. D., FREDERICTON, N. B.

I have been much interested in reading in *Braithwaite's Retrospect*, Vol. 84, p. 229, and Vol. 85, p. 84, of several cases of contagious pneumonia, so-called, and would like to give my experience with what seems to be the same disease, in the hope that the attention of your many readers may be called to cases that may have occurred to them:—

On Sunday, January 7th, at noon, I saw for the first time E. O. L., a stout, fleshy, well-developed woman, æt 73, the wife of a farmer in comfortable circumstances. On Wednesday, January 3rd, at 6 p. m., after doing a "moderate washing," she was seized with severe pains in the right side, attended with frequent annoying cough and chills. She went to bed, and kept getting worse, the cough being associated with a rusty viscid expectoration, the heat of the body increased, and the respiration hurried and at times difficult and painful. She kept constantly getting weaker. On Sunday, the 7th, the clergyman of the parish saw her, and advised her husband to secure medical aid at once.

When I arrived I found her propped up in bed, face dusky, features pinched, anxious, and wearing an expression of pain. Resp. rapid, about 40; temp. 103°, pulse 136, rapid, weak, intermittent, and shuffling. On physical examination, whole back of right chest was dull on percussion and respiration bronchial. Ordered stimulants freely, and beef essence, cataplasms over affected lung. Saw her again the following morning and found her in a state of collapse, and death took place at 4:40 p. m.

On the following day (Tuesday), early in the afternoon, her husband, æt 73, a rugged old man, whose life had been a continuously healthy one, was taken with sharp pains beneath lowermost part of sternum—cough and sense of chilliness. I saw him at 7 p. m., and found him sitting up in an easy chair, face flushed, and skin of forehead and neck and conjunctivæ of yellowish hue, breathing hurried, about 36 per minute, pulse 120—not very strong. He complained of the sub-sternal pain and excessive weakness. The cough was slight, with no expectoration. On physical examination, found slight crepitation in the lower part of the right lung posteriorly—no other physical signs. I ordered him to bed, and prescribed diaphoretics, cough mixture, quinine, stimulants with concentrated nourishment, and a mustard cataplasm to be applied. Saw him the following evening, when he reported himself better. The improvement, however, was imaginary and arose from the excitement attending the removal of his wife's remains. The crepitation in the right lung had extended. Resp. was broncho-vesicular, 40; temp., 104°; pulse, 130; fuller and stronger than the day previous. The jaundiced hue was deeper; the face more dusky; the countenance more anxious. The cough was worse, and the expectoration rusty and viscid. Saw him on Thursday, and on Friday, the disease still keeping on unchecked, the pulse growing weaker, and the lung continuing a course toward complete consolidation. On Saturday morning he was in a state of collapse, and realized that the end was fast approaching. He died the following morning.

Here, we have the history of two cases of lung inflammation in the same house, pursuing a very similar course, and each terminating fatally—the one within six days of the other. Both persons were rugged and healthy; and though 73 years of

age, time did not bear heavily upon them. There was nothing in the location or surroundings to suggest a septic influence at work. A granddaughter, 8 years old, was the only other occupant in the house. I cannot conceive that the sickness and death of the husband was a mere coincidence. Following so closely upon that of the wife there must have been some contagious or infectious agent in the case, and no other solution appears clearer to me than this: That from the breath or expectoration of the wife, as she was tenderly cared for by the husband alone during the first three days of her illness some noxious principle gained entrance to his system, setting up the train of symptoms described.

SYMPATHETIC DISEASE OF THE EYE.*

BY W. F. COLEMAN, M.D., M.R.C.S.E., ST. JOHN, N.B.

Mr. President and Gentlemen,—He who does not think his subject of paramount importance is not in a fit frame of mind to address his hearers. So possibly, to claim their attention, he not seldom assumes the virtue of believing the subject under consideration of the greatest consequence for weal or woe that ever occupied the mind of man. Without announcement you shall be the judges whether sympathetic inflammation of the eye (which so often implies total blindness and all it entails) be of consequence—yet it would be neither advantageous nor becoming to occupy much of your time. While so many granaries of individual experience are collected under one roof, I shall be very sadly disappointed if many are not unlocked to contribute some of their seed-grain for the crop of universal knowledge. Let me say plainly, if in spite of an opportunity to contribute to our necessity, all the grain is mistakingly withheld for your own bread, or delusively held to raise the price of corn, you deserve the misery of the miser, and with an apology to the brokers for the comparison you are as bad as they.

The causes, nature, symptoms and treatment of sympathetic inflammation of the eye receiving a meagre place in the text books on general surgery, may be sufficient excuse for citing the views of some special writers; while some brief statement

of my own experience and opinions seems to me in keeping with the object of this meeting.—Unfortunately the nomenclature of diseases of the eye, in common with other diseases, is often confusing, e. g., sympathetic ophthalmia, ophthalmitis and inflammation are generally used synonymously, while others divide sympathetic ophthalmia into two forms, i. e., sympathetic irritation and sympathetic inflammation. So excellent and usually accurate a writer as Mr. Lawson, at first confuses sympathetic irritation with inflammation, and then by his own defining shows how they differ in kind. He says: "Symp. ophthalmia is a peculiar *inflammation* (sympathetic) of one eye, excited by some special irritation in the other." Again: "there are two forms of symp. ophthalmia, 1st. symp. irritation; 2nd. symp. inflammation: which is equal to saying: symp. inflammation has two forms, 1st. symp. irritation; 2nd. symp. inflammation. Now the objection that irritation is not a form of inflammation is a vital one by Mr. Lawson's own showing when he so well defines how irritation lacks the conditions of inflammation, and refers to the curability of the former thus: "Although the eye may be subjected to frequent attacks (of irritation) yet no fibrinous effusion nor disorganizing changes take place, and the excision of the lost eye at once arrests the disease. All sympathetic irritation ceases when the cause which gave rise to it is removed." In fact some writers maintain that this form of irritation (sympathetic) is a neurosis which never passes over to inflammation. Admitting (with most authorities) sympathetic irritation to be a premonitory stage of sympathetic inflammation is not a concession of their identity or similarity. It might be best to limit the word ophthalmia to inflammation which it usually implies, and to include under sympathetic affection, sympathetic irritation and sympathetic inflammation. The latter usually appears as a plastic inflammation of the iris and ciliary body—the early stage of the irido-cyclitis is marked by increased tension of the eye, and later in severe cases the pupil is blocked with lymph, cataract forms and the eye atrophies.

The usual causes of sympathetic disease are wounds of the eye, particularly in the region of the ciliary body, that is within a belt of the sclera $\frac{1}{8}$ in. in width surrounding the cornea; the irritation of foreign bodies in the globe; and of degenera-

*Read before the New Brunswick Medical Society, July 18th, 1882.

tive changes which occur in lost eyes. Although the path by which the disease travels from the injured or exciting eye to the sound one, and the character of the traveller are not accurately determined, the way is most probably from the injured iris and ciliary body through the ciliary nerves to the iris and ciliary body of the sound eye; the enemy appearing in some cases in the guise of inflammation of the ciliary nerves, in others in the form of a nervous irritation reflected through the nervous centres upon the vaso-motor nerves of the iris and ciliary body.

The most characteristic symptom of sympathetic irritation is weakened accommodation, so that the patient holds the book far away, and reading near is painful or impossible. The eye avoids light and waters if exposed to it or much used. Sympathetic inflammation very rarely begins in less than three weeks after injury of the exciting eye, generally in two or three months, and may occur at any time after during the whole life. Wells records a case so late as twenty-six years after injury, in which a piece of metal was found lodged in the detached retina. The attack of inflammation usually begins with symptoms of irritation, or, as some believe, may set in without any warning. The latter mode I have never seen. In advanced stages there are usually symptoms of plastic iritis, cyclitis and chorioiditis, viz.: pericorneal injection, discolored iris, a pupil irregularly dilated by atropine, pain, impaired vision, and tenderness upon pressure at the margin of the cornea. Mild cases may do well but in the majority blindness is the result. The condition of the injured eye which from first to last is a standing menace to the sound one, is cyclitis, the pathognomonic symptom of which is tenderness upon pressure at the margin of the cornea and especially above.

If in any case it is right to formulate a universal rule as to treatment, this I think is applicable to injured eyes: Advise the removal at once of every eye in which the sight is lost from injury in the ciliary region, and every eye lost, from any cause in which the ciliary region is tender, in order to avoid the risk of a disease so fatal to vision as sympathetic inflammation. Whether it is useful to remove the offending lost eye after a sympathetic inflammation has been set up in its fellow, authorities do not agree. Carter says: "I have never seen any evidence of benefit from enucleation if

sympathetic ophthalmia is once set up. My own experience has been, in nearly all cases, the very opposite, and speaking from memory, out of fifteen to twenty cases of sympathetic disease I do not remember a case (with two or three exceptions) that was not benefited more or less, and some very much by enucleation. Dr. Wecker, than whom I know not a better authority on "Ocular Therapeutics," writes: "In all cases where an eye has been the cause of sympathetic ophthalmia and is itself hopelessly lost, it must be removed at once in order to allow of any hope of success in the treatment of its fellow. Any halting between two opinions as to whether some other mode of treatment would not be as well, or as to whether some operation might not be substituted for enucleation, or any misgiving that enucleation, if practiced during the active period of an inflammation, may aggravate the symptoms is in such a case disastrous beyond measure. Enucleation followed up by energetic treatment, such as hyd. perchlor, potass. iod. and pilocarpine may still yield most satisfactory results." If a patient presents himself in whom a wound of one eye has induced sympathetic disease, and the wounded eye preserves the better vision of the two or even less than its fellow, the question of treatment is often a very puzzling one. Considering a traumatic inflammation much less malignant than a sympathetic, and therefore much more likely to yield to treatment, my own practice has been not to enucleate, and it has not been regretted, for the injured eyes have made fair recoveries. It may be urged that the sympathetic eye would have improved more with enucleation, but that being sometimes doubtful, it seems to me better to give the patient the benefit of the double chance of two eyes by not enucleating. Having drawn your attention to some of the salient points of the subject, others may be mentioned while relating a few illustrative cases.

CASE I.—Ann R. æt. 49, colored, consulted me at the St. John General Hospital in July '81, and reported that twelve years ago the right eye was struck by a bone; for three months after the injury the eye pained severely and then became quite blind. There has not been pain since, except occasionally during the past four weeks. The left eye for the past three months has been sensitive to light, waters, and does not see so well either near or at

a distance ; vision left eye is 1-5. There is peri-corneal injection.

Present state of right eye : ball atrophied to $\frac{3}{4}$; ciliary tenderness above cornea ; bony degeneration of choroid. Treatment—Right eye enucleated ; vitreous is found to be replaced by bone.

Aug. 1st.—Left eye ; no peri-corneal injection or photophobia ; lachrymation less ; vision the same = 1-5.

CASE II.—June 26th, '81 ; H.P. æt. 42, farmer ; says his left eye was lost six years ago by the blow of a hammer. It pained more or less for three years after the injury, but not any for the past three years. The right eye gave him no trouble till three months ago, when it got red and painful ; the sight began to fail and has gradually grown worse.

Present state of left eye : shrunk to half size, and somewhat tender over upper ciliary region. Right eye—general epi-scleral lilac-colored injection, cornea hazy, iris discolored, pupil very irregular. After atropine, upper ciliary region tender ; vision = $\frac{1}{2}$.

Diagnosis—Keratitis and Uveitis.

Treatment—Enucleation of the left eye, and atropiæ grs. iv. ad. \mathfrak{z} j. in right eye four times daily, R. pil. hyd. grs. ijss.

June 28th—Can see better ; vision = $\frac{1}{2}$; cups applied to right temple.

June 30th—Four days after enucleation, vision increased to $\frac{1}{2}$ and cornea clearing.

July 8th—Vision increased to $\frac{1}{2}$; no pain, and cornea much clearer.

CASE III.—J. H. D., æt. 34, barrister, consulted me July 2nd, '81. The left eye was lost in infancy and is now $\frac{3}{4}$ the size of normal ball ; the cornea is replaced by opaque fibrous tissue excepting a central calcareous spot ; there is moderate tenderness of the upper ciliary region, but the shrunk eye has never been painful. The right eye was healthy till fifteen years ago, when for a week it was red and the sight impaired. Four years ago it had a similar, but much severer attack, the eye was very painful and bloodshot. Twenty months ago had a third similar attack which lasted a week. For a long time there have been frequently days, when he could not read with any comfort, and for the past year the eye has watered very much when exposed to the wind.

Present state of right eye : Vision = $\frac{1}{2}$ = reading

No. 4 Jaeger, Hus. = $\frac{1}{8}$. Dots of uveal pigment on lens-capsule (the sequelæ of old iritis). A few floating bodies in the vitreous ; the disc is so blurred as scarcely to be distinguished from the surrounding retina (the result of optic neuritis). Enucleation was advised and was performed four days after. A bony mass half the size of a marble occupied the vitreous space.

July 11th—Five days after the operation the right eye feels much stronger than before the operation ; vision the same.

August 31st—Patient writes, "the eye is much stronger, vision is better, and there has been no relapse of weakness of eye since the operation." He has gained six pounds in flesh.

Query—Was the optic neuritis in this case, transmitted from an optic neuritis in the exciting eye, or was it secondary to sympathetic iritis ?

REMARKS—In cases I. and III. bony degeneration of the choroid was the probable exciting cause of the sympathetic disease. In cases I. II. III. sympathetic disease set in, twelve, six and fifteen years after injury in first two, and loss of eye in case III. respectively. In case I. the eye improved after enucleation but vision remained the same. In case II. an enucleation during sympathetic irido-cyclitis, arrested the disease of the eye, and vision was much improved while the patient remained under observation. He has not since been heard from. In case III. vision and the condition of the sympathetic eye improved after enucleation.

Optico-ciliary neurotomy, (an operation performed by division of the optic nerve and denuding the posterior surface of the eye-ball) has not been so fortunate in its results, as to take the place of enucleation in sympathetic disease. The optic nerve has been known to re-unite after division, and frequently the ciliary nerves have re-united and sensibility of cornea returned with sympathetic disease of fellow eye. I will conclude with the indications for enucleation :

1. An eye lost from injury or otherwise may be removed to prevent sympathetic disease, or may not be according to the intelligence of the patient. May not be if the patient will observe and report himself upon approach of sympathetic irritation.

2. The lost or seriously injured eye must be removed when sympathetic irritation (only) is excited in fellow eye.

3. When sympathetic irido-cyclitis has occurred

It is an open question whether enucleation is beneficial. If the offending eye is lost I would enucleate, if it has vision most men object to operation.

4. In sympathetic serous iritis experience has pretty well established (Mathews) that enucleation converts a curable disease into a malignant iridocyclitis.

Correspondence.

INTEGRITY MEDICAL AID FUND.

To the Editor of THE CANADA LANCET.

SIR,—Your attention and that of your medical *confrères* is respectfully drawn to a circular which has been recently issued by a "medical syndicate" in this city. The circular referred to is not the work of novices. All are not young and inexperienced fledglings, and time alone will prove the fatuity of their efforts to obtain popularity and wealth in the path they have chosen. I will give a few cases as an illustration. A member of the "medical syndicate" had been attending a family and receiving his regular fee as his visits were made. Unknown to the doctor the head of the family had joined the "institution." The doctor's services were called on again and after due attendance he presented his bill. Judge of his disgust when his patient retaliated with his little *card* showing that he was entitled to the doctor's services and medicine at the rate of *one cent per day*. Medico No. 1 "left," and No. 2 had to attend as per circular. To show the Company's politeness and courtesy to outsiders, I may mention a case in which one of our prominent medical men was brought in contact with one of them. Dr. A. was called in and prescribed for a child taken suddenly ill, and went his way to other urgent cases. A few hours afterwards he called again and found a Company man in attendance and in the act of prescribing. The Company man was asked what he was doing there. He replied that he was not aware that any other doctor had the case in hand, although there were some of the doctor's bottles before him on the table at which he was writing his prescription. On being challenged he backed out in a very clumsy and half inarticulate way. In the meantime he had prophesied the immediate death of the child, who is yet alive and well. If this is

the way the noble "twelve apostles" are going to work, what about our code of medical ethics? These so-called medical experts, like Drs. K. & K., are trying to cut up the field of honorable, gentlemanly and intelligent practitioners, but fortunately the common sense of a discerning public will in the end oppose them. We have too many of these "Institutions" in our midst. All are arrant humbugs. It is deeply to be deplored that these "excrescences" are growing in our midst, and that the practice of medicine, to a certain extent, is being dragged down gradually from its high and noble position. They require a vigorous roasting and will eventually become annihilated. The "Integrity Medical Aid Fund Company" are advertising for agents. I can recommend one whom I know will suit the organization perfectly. I allude to a detective of the "Society for the Prevention of Cruelty to Animals," well known as the "little man with frogs all over his coat." He will make a capital collector for the *one-cent-a-day-dodge* business. He can also stand between the "Integrity Medical Aid Fund Society" and their victims, in his official capacity as detective of the "Society for the Prevention of Cruelty to Animals."

With reference to the above let me quote the following excerpt on "The duties of the Physician," from the issue of your valuable journal for January last:—"Art is long, time is short, opportunity fleeting, experience deceptive and judgment difficult," such were the serious reflections of the Father of Medicine after he had labored with the problems many years and accomplished more than perhaps any man who has practiced the healing art. In those days when so many doctors may be found who are little better than professional loafers, so many who discourage the reading of medical works, who express their contempt for original research and scoff at medical journals; regarding the accumulation of money as the only test of professional success, and who depend on their own personal shrewdness and gullibility of the people at large to excuse the title under which they thrive the following relative to the life of Dr. Geo. B. Winston, from the *St. Louis Courier of Medicine* is refreshing—"A friend once remarked to him, 'Doctor, what necessity is there for ceaseless labor and study at your time of life?' With a look of astonishment, never to be forgotten, he replied, 'my dear sir, I am under bonds to do it. When

I offered my services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which the human flesh is heir ; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God would hold me responsible for the loss, through inexcusable ignorance, of a precious human life, and punish me accordingly ; and whenever I get my consent to be content with present professional attainments, and trust my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations, which, with my best endeavors to meet them honestly and conscientiously, are still sometimes almost heavier than I can bear."

Yours, &c.,

PRACTITIONER.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

A meeting of the above association was held in Clinton on Tuesday, the 9th of January, 1883, when the following officers were elected for the present year. Dr. Hurlburt, of Brucefield, President ; Dr. Williams, of Clinton, Vice-President ; Dr. Graham of Brussels, Secretary-Treasurer.

Dr. Sloan, of Blyth, read a report of 11 cases of "Diphtheria," occurring during the recent epidemic in this district. His internal treatment consisted mainly in the old combination of tr. ferri mur. and potassæ chlor. He applied generally twice a day to the membrane, tincture ferri mur. sulphurous acid, carbolic acid and glycerine, and also very frequently salicylic acid and alum in solution. He also lays great stress on pencilling the membrane very thoroughly with the latter solution by means of a brush, so as to remove as much of it as possible, leaving less for absorption, which he claims is an important factor in increasing the virulence of the disease.

The paper brought out lively criticism and discussion, in which Drs. Worthington, Holmes, Williams, Sloan, and Graham took part.

Dr. Worthington, of Clinton, read an interesting report of gangrene in the roof of the mouth, resulting fatally in a child eight months old.

Dr. Graham, of Brussels, showed some instructive microscopical specimens, amongst which were the "Bacillus Anthracis," from a case of "splenic fever," spurious melanosis of the lung, and a section of epithelioma of the clitoris obtained from a patient shown at last meeting.

TORONTO MEDICAL SOCIETY.

Nov. 2nd, 1882.

The President, Dr. George Wright, in the Chair. Dr. H. C. Burritt was elected a member.

Dr. Graham showed the case of tinea kerion reported by him at last meeting. Much improvement had taken place under treatment by sulphurous acid bathing, followed by applications of iodide of sulphur ointment. Syr. ferri iodidi was given internally.

Dr. Cameron said that he had found, in a case of tinea capitis, the application of sulphurous acid, followed by glycerine and carbolic acid fail to destroy the parasite, while the sulphurous acid alone succeeded perfectly.

Dr. Canniff reported a case of placenta prævia with hemorrhage which occurred suddenly on rising from tea. Digital examination discovered the placenta to the right of the os uteri. Labor pains came on at midnight, and delivery followed in due course, without a recurrence of the hemorrhage.

Dr. Cameron said he lately had a case under his care which simulated placenta prævia. The woman rose at night to urinate, and half a chamberful of blood was passed. Examination failed to discover any evidence of placental presentation. Delivery took place next morning without any untoward symptoms. Dr. Cameron then read a very practical and exhaustive paper upon fractures of the os innominatum.

Dr. A. H. Wright said that most of the cases he had seen were the result of railway and other injuries of a severe character, and usually terminated fatally. He believed that fracture of this bone often passed unrecognized. In his own case, lately reported, though the bone was broken into many pieces, only fracture of the ramus was discovered with certainty, and yet if the spine had not been injured the girl would probably have recovered. He thought the treatment should be rest in the most comfortable position.

Dr. Nevitt asked if any further evidence existed to support the statement of Dr. Neill, of Philadel-

phia, that callus is deposited only on the outer surface of this bone during union after fracture.

Dr. Cameron said the statement was based on the condition found in Neill's Cabinet specimens, and he knew of no corroborative evidence save that furnished by analogy, that in other flat bones callus is often found only on the external surface.

Dr. McFarlane reported a case of fracture extending across the face, caused by impaction between the floor and a descending elevator in a warehouse in this city. The alveolar processes and hard palate were moveable *en masse*. Favourable progress has been made in the case, the parts being simply maintained in position by a bandage passed under the chin, as is done in fracture of the lower jaw.

On motion, a committee consisting of Drs. Workman, Nevitt and McPhedran was appointed to report on the expediency of establishing, under the auspices of this society, a directory for nurses.

Nov. 16th, 1882.

The President, Dr. George Wright, in the Chair.

Dr. Cameron showed a part of the ileum from a woman who died from bowel obstruction, symptoms of which existed for a week prior to death. She had a small femoral hernia, which was soft, dull and reducible within the saphenous opening, but not within the abdominal cavity. It was evidently omental and had no bearing on the symptoms present. There was severe pain in the epigastric region; vomiting was persistent, becoming stercoraceous 12 hours before death. The symptoms not improving, the hernia was explored and found to be omental as anticipated. It was adherent, but there was no inflammatory trouble present.

P. M.—Pyloric orifice of the stomach contracted from a deposit, possibly syphilitic. The last few inches of the ileum were much contracted, so much so that water could scarcely be forced through it. The caput coli was much distended with fluid feces. There was another constriction at the sigmoid flexure.

Dr. Cameron also showed the larynx and trachea from a woman, between 30 and 40 years of age, who died in the General Hospital. She was syphilitic. For about ten weeks she suffered from laryngeal trouble, expectorating pus and blood. Dyspnoea was severe at times, but in the intervals the breathing was easy. Anti-syphilitic and seda-

tive treatment mitigated the symptoms, but in one of the attacks of dyspnoea she died suddenly from suffocation. Tracheotomy had been decided on the day before death, but was postponed in order that the students might be present to witness the operation.

P. M.—A carious cavity full of pus was found in the posterior part of the larynx, the cricoid cartilage being the seat of the disease. There were also a few ulcerated patches in the trachea.

Dr. Nevitt showed a ruptured stomach from a man injured by a piece of wood thrown back from a saw against which he was holding it. The accident occurred shortly after dinner. He was able to walk from the conveyance in which he was taken home to the house. The pain was severe; no vomiting; could take a full inspiration. There was retention of urine. During the night the pain became diffuse and evidence of general peritonitis developed. At 8 o'clock next morning he asked for a drink of water, sat up to drink, and then fell back dead.

P. M.—Much gas in the peritoneal cavity, slight exudation on peritoneum. A rent one inch long in anterior wall of stomach near the pyloric end; this was under the seat of injury. The posterior wall was absorbed. Some extravasation behind peritoneum.

Dr. Geo. Wright showed part of the spine from a man who was injured on the railway. There was a good deal of shock. The lower extremities were partially paralyzed; the paralysis became complete a few hours after the injury. The bladder was also paralyzed, and consequently there was retention of urine. Death took place suddenly next morning.

P. M.—There was great infiltration of the soft tissues about the seat of injury and of the psoæ muscles. The spinous processes of the 10th, 11th and 12th dorsal vertebræ were fractured, as well as the laminæ, and the spinal cord was lacerated.

The report of the committee appointed at last meeting was read and adopted, recommending the establishment of a directory for nurses, and suggesting a plan for giving effect to the report.

January 11th, 1883.

Dr. W. J. Wilson, 2nd Vice-President in the chair.

After routine business Dr. Graham showed part of the ileum from a patient who died of enteric

fever at the end of the third week. Symptoms of perforation occurred 48 hours before death. The *post mortem* showed a large quantity of the contents of the bowels in the peritoneal cavity. There were several large perforations in the lower part of the ileum, one near the ileo-cæcal valve was about $1\frac{1}{2}$ inches long, and occupied nearly half the circumference of the bowel. Several small perforations existed higher up. Attention was drawn to the great length of time the patient survived the symptoms of perforation. Dr. Graham also showed a heart with greatly dilated right ventricle from a man who died in the Toronto General Hospital the day following his admission. The right side of heart was greatly dilated and probably caused tricuspid incompetence. An ante-mortem clot extended into the pulmonary artery. Left ventricle greatly hypertrophied. There was no pigmentation of the liver, a rare condition with dilated right ventricle, and probably accounted for on the supposition that the dilatation was of recent development, being due to the fatty degeneration of the walls of the ventricle, which was very marked. According to Balfour the bruits heard in anæmia are due to temporary dilatation. There was fatty degeneration of the liver and kidneys also.

Dr. Cassidy reported a case of death with symptoms of perforation in enteric fever, but had not the specimen to present. The symptoms showed themselves on the 21st day, and death occurred on the fourth day following. The *post mortem* showed a localized peritonitis of about the size of the hand, confined to the bowel. The effusion was scanty. The last ten inches of the ileum was dark, but no perforation could be found until the bowel was opened, when a small one was discovered. It was completely glued over by the exudation.

Dr. McPhedran referred to a new physical sign of perforation, recently brought to the notice of the profession by Dr. Flint, of New York, namely, that with the escape of gas into the abdominal cavity hepatic flatness is always replaced by tympanitic resonance, owing to the fact that gas in the peritoneal cavity (the patient lying on the back) will separate the anterior surface of the liver from the thoracic wall. This sign has been verified by Dr. Flint in the *cadaver*, by injecting air into the peritoneal cavity; and he also relates some cases affording clinical evidence of a negative character in support of the same. While assuming that

hepatic flatness is proof against perforation of the alimentary canal, it cannot be assumed that tympanitic resonance over the hepatic region is always due to perforation. Hepatic tympanitic resonance may also arise from each of the two following conditions, namely: *First*, by separation of the liver from the anterior thoracic wall by the colon having been forced up between them, and *secondly*, by the conduction upwards to the pulmonary region of the tympanitic resonance of the transverse colon when it is greatly distended by gas. If the sign is found upon further investigation to be reliable, these two *possible* conditions giving rise to hepatic tympanitic resonance will have little if any effect on the value of the sign. Dr. Flint submits his views to the profession, with the desire that others may test the value of his physical sign.

Dr. Canniff thought that in certain conditions of the system gas might be produced in the peritoneal cavity.

Dr. Nevitt reported three cases of enteric fever in which there was prolonged illness. One was marked by fluctuations of temperature ranging from normal to 104° . They all made good recoveries. The President thought there had been a marked tendency to prolonged attacks of enteric fever during the last season.

Dr. Graham thought the nomenclature required alteration. At present all fevers characterized by continued high temperature were classed as enteric. He would make two divisions of them, namely: (1) Enteric to include all cases with typical symptoms. (2) Continued fever to include the ill-defined cases.

Dr. Canniff reported a case of traumatic inflammation of the knee, met with in Muskoka last summer during a holiday trip. The man was injured in the knee by an axe, the patella being almost completely divided, the femur cut into, and the cavity of the joint evidently opened. Severe arthritis followed. A good recovery has resulted under treatment by extension, cleanliness and plenty of fresh air. He is unable to bend the knee, and passive motion was advised, with the hope of overcoming the ankylosis.

Dr. Macdonald reported a case of hydrarthrosis of the knee, which he is treating by injections of solution of tincture of iodine (3ij. *ad* 3j.) after removing most of the fluid in the joint by aspiration. The patient had taste of iodine in the mouth

a few minutes after the injection. The immediate effect of the treatment was to cause much swelling of the knee, but this began to abate in a few days, and the joint returned to its normal size. The ultimate results remain yet to be seen.

Dr. Graham said he had a similar case about a year ago with Dr. Armstrong, of this city. One drachm of tincture of iodine was injected. Both knees were treated and are now well. Other joints became affected subsequently. The iodine taste was present in this case also.

Dr. McPhedran reported a case of trouble in Scarpa's triangle, characterized by excessive pain and tenderness, slight swelling, but no other evidence of inflammation. The limb was extended, and flexion gave great pain. There was no history of injury nor evidence of any rupture of any of the soft tissues. If the bursa beneath the psoas were the seat of trouble there would have been flexion of the limb. Complete recovery resulted in about three weeks.

Dr. Rosebrugh then exhibited his modification of the McIntosh battery, galvanic and faradic combined, and gave a detailed description of it, which will be found in another column.

January 25, 1883.

The President, Dr. George Wright, in the chair. Dr. Mackenzie, Riverside, was elected a member.

Dr. Graham exhibited a placenta containing two cysts filled with dark brownish fluid. The case was premature.

Dr. Cameron showed for Dr. Harrison of Cambridge, an acephalous monster. There was no neck, and the spine was bifid throughout the dorsal and cervical regions. Birth was given to a similar monster in pregnancy previous to this one.

Dr. McPhedran showed a diffuent spleen taken from an old man who died in the House of Providence. There was marked chronic gastritis, and all the organs, especially the heart, were very friable.

Dr. Cassidy then read a paper on "Ruptured Perineum." He dealt with the subject exhaustively, relating cases in his own practice in illustration. He advocated very strongly, immediate operation in all cases. He preferred keeping the bowels loose, and urged the necessity of keeping the parts scrupulously clean by the vaginal douche. A prolonged discussion followed, in which nearly all the members present took part.

MEDICO-CHIRURGICAL SOCIETY OF WINNIPEG.

A meeting of the medical profession, of Winnipeg, was held on the 10th ult., in response to a circular issued by Dr. Whiteford, for the purpose of forming a medical society in that city. The following gentlemen were present:—Drs. Codd, Thibodo, Patterson, Munroe, McAdam, Blanchard, Minaker, Sutherland, Jackes, Brett, Seymour, Covernton, Turnbull, Jones, Kerr, Gray, Jamieson, McEachran, Mewburn, Phillips, A. H. Ferguson, McDiarmid and Whiteford. Dr. Codd occupied the chair, and Dr. Mewburn acted as Secretary.

The following officers were elected:—President, Dr. Lynch; First *Vice-do*, Dr. Whiteford; Second *Vice-do*, Dr. Codd; Sec'y-Treas., Dr. Covernton; Members of Council, Drs. O'Donnell, Patterson, Jackes, Brett, Phillips and Kerr.

In the absence of Dr. Lynch, the 1st Vice-President, Dr. Whiteford, took the chair. He thanked the members present for the honor they had done him in electing him First Vice-President, and was glad to see such a large number present at the first meeting, which augured well for the future of the society. He was glad to feel that his efforts in getting the medical men together had met with such a hearty response, and he hoped that in 1884 the Canada Medical Association, sending delegates from all parts of the Dominion, would meet in Winnipeg. He had been informed that it was the intention to do so, and it was pleasing to think that there would be a medical society to receive them. He suggested that the rules and regulations of other similar societies be obtained and submitted to the Committee, and that a meeting be called at an early date to discuss them.

Dr. Jackes suggested that the meetings be called twice a month, but the majority present seemed in favor of meeting once a month for the present. The association then adjourned.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Canada Lancet.)

The regular quarterly meeting of the Michigan State Board of Health was held in Lansing, Mich., on the 9th of January, 1883.

The subject of oil inspection was brought up, as it was alleged that much oil is being sold without being inspected. Dr. Hazlewood and Dr. Baker

were appointed a committee to take such action as was considered necessary on the subject.

The secretary made his report of work during the last quarter, mentioning the efforts to prevent the introduction of contagious disease by immigrants; the distribution of blanks and circulars to officers of local boards of health; the general distribution of the Annual Report of the Board for 1881; the issuing of a circular with a view to collecting facts respecting the cause and spread of diphtheria; the preparations for a sanitary convention at Pontiac, &c., &c. The following resolutions were passed:—

Resolved,—That the State Board of Health urgently requests our members of Congress to endeavor to secure the passage of a bill to appropriate \$25,000 for the remainder of this fiscal year and thereafter at about the same rate, to enable the National Board of Health to co-operate with State and local boards of health and quarantines in efforts to prevent the introduction of contagious diseases into the United States, and their spread from one State to another.

The invitation to hold a sanitary convention at Reed City some time in the spring was accepted.

Analyses of apple-butter and of the tinned-copper such as is used to make wash-boilers, were presented. The apple-butter is often made in such "copper" boilers when they are new. The acid of the fruit attacks the tin which often contains lead in dangerous quantities, and it is said that the tin lining is eaten off in one or two times using for making apple butter. The analysis of the apple butter showed distinct traces of lead and tin and a faint trace of copper. The ordinary clothes-boiler such as used in our kitchens, if made of this tinned-copper would have $2\frac{1}{3}$ ounces of metallic lead on its surface, an amount that must have a serious influence on persons who eat acid fruits and juices boiled in such vessels.

The subject of requiring burial permits, and thus securing mortuary statistics, before removal of the body of deceased persons, was referred to the committee on legislation, with the request to prepare a bill and submit it to the legislature.

The American Public Health Association has recommended making it a penal offense to communicate a contagious disease. The committee on legislation was requested to modify the bill so as to name diphtheria, scarlet fever, and small-pox, and get the subject before the legislature.

At a meeting of the Board, held at Pontiac, Mich., Feb. 1st, 1883, the following resolution, relative to the National Board of Health, was adopted:—

Resolved,—That we consider it of the highest national importance, as also of great importance to this State, that the National Board of Health shall receive annually an appropriation sufficient to enable it to carry on the important work of protecting the country from the introduction of contagious diseases; of collecting and distributing for the guidance of State and local boards of health, information relative to the prevalence of diseases, and particularly of contagious diseases; of investigating by specially qualified experts the obscure causes of diseases, and of publishing to the world the results of its studies and investigations, more especially concerning diseases, which, like diphtheria and small-pox, spread generally throughout the country.

Selected Articles.

THE "COAT SLEEVE" METHOD OF AMPUTATION.

BY R. DAVY, M.B., F.R.C.S., WESTMINSTER HOSPITAL.

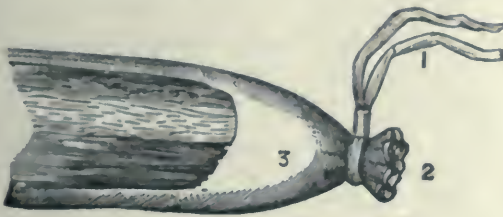
In practice, there are accidents and diseases which yet call for the necessity of amputations; and I wish to-day to bring before your notice a method of performing these operations which I have already carried out on three occasions—viz., one amputation of the thigh and two of the leg. For brevity's sake, I will style this method *the coat-sleeve*; and this name has been chosen because my left coat-sleeve has illustrated this procedure to my class, and gives a good idea of the operation. Cheselden (1720), of the Westminster Hospital, originally advocated the circular plan of amputation, which, according to Syme, was modified by Mr. Mynors of Birmingham; and this circular method has held its ground as a standard procedure; but I think good reason may be given for advocating still further modifications in this amputation.

Let me first describe the details of the *coat-sleeve* operation, and next point out the advantages that, in my opinion, result from it.

Carry in your minds the essentials of a circular amputation (a very good account of this circular method is given in William Hey's *Surgery* (1814, page 526); and you will see that the coat-sleeve method is but a modification of a very old operation. Let me insist on the formation of a long integumentary sleeve, from three or four to six inches; and that your dissection should be directed so as to separate the superficial from the deep

fascia; and very much of this dissection is accomplished by firm traction of the skin towards the trunk of the patient, assisted by slight drawings of the knife on attachments. I have frequently, on the dead body, invaginated skin on skin, as the cut end of the finger of a glove may be turned over the kid on the finger; and on the living patient this is necessary, so as to gain sufficient length of skin-cylinder from its end to the point at which division of the bone takes place. I would impress on you not only the importance of making a far greater allowance for retraction of skin in planning an amputation, but also the comparative uselessness of any other structure than skin for making an efficient and lasting pad for the end of the bone. It is the skin, fat, and hypertrophied sub-structure that give a good cushion; and with stumps, as well as ordinary seats, when once the leather has given way, the so-called stuffing soon wears, and bare boards and bare bone shortly show themselves. The tuber ischii, knee, elbow, and heel are good illustrations of these points.

Having dissected your skin-sleeve accurately, and divided all the structures down to the periosteum, carefully peel this membrane upwards to the point at which the saw is to be applied, and shelter the soft structures from the stroke of the saw by means of a slit bandage, retracted by an assistant; and, within reasonable limits, the smaller the saw is, the easier is the division of bone effected. Next, trim your stump (*i. e.*, cut off with scissors any projecting tendon or nerve), and tie or twist the bleeding vessels. Then tie up the skin-sleeve (3) with a piece of tape (1) passed through a cylinder, as shown in the diagram allowing the ligatures (if



any) to hang through the crucial slit at the face of the stump. Treat your wound either with or without dressings—I much prefer none; and carefully watch that no undue strangulation of the “off-end” (2) of the skin-sleeve occurs. Should the stump become oedematous, or any necessity for drainage arise, insert a drainage-tube into the centre of the face of the stump, of sufficient firmness to prevent a too ready collapse of its walls (*e.g.*, a piece of gum-elastic catheter), and allow the excretion to flow into a pledget of marine tow or some absorbent material. As yet I have not had occasion to resort to any artificial drainage. The wound cicatrizes up to one-half or one-fourth of an inch; and a central button of depressed scar-tis-

sue results, surrounded by soft, fatty skin-cushions, plaited in a radiating manner from the centre to the circumference of the face of the stump. This method of amputation is applicable to any part of the extremities, in those cases where the surgeon has the opportunity of selecting the precise point of removal, and where the adjoining skin is sound. In my own experience, the middle of the leg, where the muscles of the calf swell, is about as difficult a situation as any for carrying out the dissection of a long sleeve.

CASE I.—J. C., aged 6, was admitted on many occasions into Mark Ward, suffering from recurrent acute attacks of synovitis of the right knee-joint. He was admitted on the last occasion on December 2nd, 1880. On March 8th, 1881, finding the boy was steadily becoming worse, and sinuses multiplying, I amputated his right thigh (conjunction of middle and lower third) by the plan now under discussion. His convalescence was excellent. The stump was good; a circular small cicatrix formed in the centre of its face; and linear creases of skin and fat radiated from the centre to the circumference, suggesting the button sewn into an ordinary sofa-cushion. He has been rusticated for the last few months at Hurst, near Twyford, or he would have been shown to-day.

CASE II.—T. D., aged 13, was admitted into Mark Ward on June 1st, 1881, for strumous disease of the left ankle-joint and periostitis of the lower end of the tibia, with much skin-ulceration. He was operated upon on August 16th, 1881, by the coat-sleeve method (middle of leg); was discharged on September 28th, 1881; and has walked well with a bucket-leg since.

CASE III.—J. S., aged 42, was admitted into Henry Hoare Ward in August, 1880, drunk, and with a compound comminuted fracture of the right tibia and fibula, which resulted, after six months' treatment, in an ununited fracture. Many fragments of bone were removed on and subsequently to his admission. On October 8th, 1881, he was re-admitted; and on October 11th, 1881, the coat-sleeve method of amputating was resorted to, through the ununited fracture. He was discharged well on January 13th, 1882; and has been walking about with an artificial foot until within the last ten days, when he fell and broke his opposite femur (left). He promised otherwise to have shown himself to-day. The instruments used at this amputation were few—Esmarch's bandage, scalpel, artery and torsion forceps. His stump (when I last saw it, in March 1882), was the perfection of what a stump should be: central depressed cicatrix, and good fatty skin-creases around, making, by involution of the scar, a soft circular cushion, on which his weight (and he is a very heavy man) was carried painlessly.

Lastly, let me point out what are the probable advantages of this method of amputating.

1. The conservation of an abundance of skin, subcutaneous fat, and areolar tissue, which, by mechanical arrangements, are utilised, so that the scar is reduced to a minimum, and the cushions to a maximum.

2. The total abolition of sutures, which, however necessary, are invariably painful on removal; and the sutures, as previously employed, necessitated a linear cicatrix on the face of the stump.

3. The facility granted to the house-surgeon for restraining, and to the patient for escaping, secondary hæmorrhage.

4. Freedom from pain, exclusion of air, and adaptability for perfect drainage.

5. The symmetrical appearance and utility of the stump.—*Brit. Med. Journal.*

CAFFEIN IN HEART DISEASE.

The use of caffein has not become general in this country as yet. In England it has attracted some attention as a diuretic, and it has been used to some extent as a nerve tonic, Dr. Shapter having especially commended it in the treatment of nervous diseases dependent upon the abuse of alcohol.

Professor Lepine, in a recent paper in the *Lyon Medical*, urges the use of caffein in the treatment of heart disease, in the same class of cases in which digitalis is usually found valuable. He thinks that caffein possesses distinct advantages over digitalis, which he considers in detail.

He has been using caffein in these cases for four years and has administered it to more than sixty patients. He maintains that the dose, to be effective in action upon the heart, must be considerably larger than that which has ever been generally administered heretofore. He gives from 60 centigrams (9-25 grains) to one gm. 50 (23 grains), and sometimes 2 grams (30 grains), or even 2 gms. 50 (30 grains). Such doses as are directed in the books he finds utterly inefficacious.

He found that this drug is equally effective with digitalis in retarding the rate of cardiac action and in increasing its force. In comparing the relative merits of the two drugs, he asserts that caffein acts much more rapidly than digitalis, which fact, though it may be of little importance in a chronic disease, may be of real importance where asystolia occurs as an acute condition. Secondly, he says that caffein is much better tolerated than digitalis, and if taken in divided doses during the day very seldom causes any symptoms of intolerance at all, such as are not at all infrequent in the administration of digitalis. This he attributes to the facility with which caffein is eliminated. Of course, where the kidneys fail to eliminate the drug it would be retained in the system, and would occasion dis-

turbance, but he claims that the danger from this source is far less than that from the use of digitalis. Finally, he has found that by the majority of patients the caffein is preferred to the digitalis. He has repeatedly found this to be so in cases where he has used both drugs alternately upon the same patient.

On the other hand, there is a certain proportion of patients (he has found this true in about one out of twenty) in whom caffein produces insomnia and other nervous symptoms. While these cases are rare, they do occur, and this condition is an absolute contra-indiction to the use of this drug.

The only other inconvenience in the use of caffein is the expense of the drug, which places it beyond the reach of patients in straightened circumstances.

M. Lepine does not claim that caffein will cure all cases of asystolia, but does assert that it has all the merits of digitalis, and some advantages over that drug. He promises to give reports more in detail of his own observations, and of cases that have been reported to him by some of his colleagues.—*St. Louis Courier of Medicine.*

IMPROVED METHOD OF TREATING UTERINE DISPLACEMENTS.

BY ROBERT BELL M.D.

The peculiar poising of the uterus in the body, the elasticity, or rather yielding nature of its supports, and its dependence upon the health of the neighboring viscera for this support being uniformly maintained, renders it peculiarly liable to displacement. Anything which interferes with circulation in the pelvis will naturally interfere with the health of the womb, and will thus render it more susceptible of disease, and will predispose to malposition. If constipation exists, then the weight of the feces in the sigmoid flexure and the higher reaches of the colon will not only interfere with the free circulation in the pelvis, but will also by mechanical pressure on the organ crowd it out of position. If we have an irritable bladder, and in consequence the viscus being unable to retain more than a few drachms of urine, the straining which accompanies micturition will force the uterus forwards. Another pregnant cause of displacement is dyspepsia, which causing distention of the intestinal canal, brings undue pressure to bear from above upon the fundus. One more powerful factor has recently been pointed out, viz., the endeavor to obtain greater compass and volume in singing by powerful action of the abdominal muscles, and so forcing downwards all the viscera. It is obvious that any causes such as those enumerated must be removed before local remedies can have the desired effect.

It will also be necessary to attend to the health of the canal of the neck and body of the organ at the time the displacement is being tackled, or we will be most certainly disappointed.

I have had this remedy as it now stands in use about two years, and have treated over 200 cases by means of it alone. I have not used a pessary during the past 18 months. Every form and gradation of displacement has come under observation, and in every case great relief was obtained, and in the majority of cases a complete cure was the result. The patient requires to be under careful and patient observation for weeks in every case, and in many instances for months at a time; but surely these are trifling objections. I had used, for years previously, the ordinary glycerine of tannin of the pharmacopœia; but though I found it a most efficacious astringent, yet its expense and the disadvantage of staining the underclothing told very much against it. Had recourse to the following:—Glycerine, 80 oz.; alum, 10 oz.; carbolic acid, $1\frac{1}{4}$ oz. If a displacement continues for any length of time, hypertrophy of some portion or of the whole organ is the result. We have thus a greater strain thrown upon the uterine supports, so that what at one time was a result becomes a factor in aggravating the disease. Our first duty, then, is to endeavor to reduce the overgrowth, and at the same time prevent its recurrence by rectifying the position of the organ and retaining it *in situ*. When we have a hypertrophied condition of the walls of the uterus, in the majority of instances there is softening of the texture, so that a flabby condition results. In these cases it is a matter of little difficulty to restore the position of the organ, but as soon as the support is removed it falls back into its abnormal position. Moreover if there exists, (which frequently does), any amount of inflammatory action, the presence of a pessary is a most serious source of danger; and besides, supposing there is no danger of an attack of acute metritis, there yet remains the disadvantage that the relief is entirely due to the fact that a mechanical support being retained in the vagina, and which every little while requires to be removed to make way for one of larger size, till in the course of a short time the walls of the vagina become as capacious as the pelvis will admit of; moreover the woman always retains the disagreeable consciousness that she is wearing an instrument, and there is ever present the danger of the hard pessary injuring the soft parts upon which it is constantly resting. A pessary to be of service must fit accurately, and only long experience and patient care will ensure this result. If it does not apply itself with precision to the parts, it certainly will result in serious mischief. One advantage of my treatment is, that it is rarely necessary to employ either probe or elevator when there is a flexion. This is another prolific source of danger removed.

Prolapse of the uterus: This may vary from a slight lowering of the position of the womb to complete procidentia. It is due either to (1) an increase in weight of the organ; (2) to faulty action of the supports; (3) it may arise from pressure from above, or from all these factors combined.

A lacerated perinæum must of course be rectified before treatment. From whatever cause prolapse occurs, there is always, as a result, hypertrophy of the organ and relaxation of the vaginal walls and uterine ligaments. If the uterus, then, is elevated to its normal position, and retained there by a suitable appliance, the hypertrophy will disappear, and if at the same time we can stimulate the capillary circulation of the parts, and also cause a steady drain to take place of the watery constituents of the blood in the uterus and its neighborhood, we will do much to remove the tendency to the displacement by reducing the size of the organ and simultaneously strengthening its supports. This end is attained most satisfactorily by replacing the prolapsed uterus in its normal position, and retaining it there by a tampon of cotton saturated with the glycerine of alum and carbolic acid, and allowing this to remain in the vagina from 3 to 4 days. The tampon excites an abundant watery discharge from the vagina, necessitating the patient constantly to wear a napkin. Glycerine excites this discharge, but when combined with an astringent, the effect is an even more profuse drainage of the watery components of the blood; the effect on the capillary circulation is also intensified, and the astringent effect on the vaginal wall is most beneficial. By this means alone I have completely cured procidentia which existed 3 to 8 years, after above treatment had been persevered in for from 2 to 7 months, and in a few cases where the disease existed for a much greater time very great relief has been experienced after more protracted treatment. If the tampon is merely saturated with glycerine it becomes very offensive after a few hours; when, however, the carbolic acid is added, there is no fetor at the end of four days when the tampon may be replaced. We can keep the organ *in situ* for months, and likewise act on it and the neighboring tissues to restore them to a healthy condition, the woman's general condition indicating a marked improvement. I claim for this method of treatment equal advantages with any plastic operation that may be performed upon the vaginal wall; and there is this, that the uterus itself also probably partakes of benefits which an operation on the vaginal walls cannot confer.

Versions and flexions of the uterus: I have treated quite a number of cases which had been subjected to the general routine of pessaries and stems without deriving any benefit whatever, and which have, after a few applications of the tampon, expressed themselves as feeling great relief. It may perhaps be interesting to give one case.

This lady had been suffering from retroflexion of the uterus for six years, which was aggravated very much by obstinate constipation, but this symptom had been quite overlooked. She was a most miserable looking object, with an ashy complexion, which, however, was partly attributable to the absorption of fetid matter from fæcal accumulations in the rectum and colon, as when these masses were removed and kept from accumulating, her complexion improved, and she felt somewhat relieved in every way. Yet the least exertion completely prostrated her, and the dysmenorrhœa was most intense. For six years she had been under treatment by means of pessaries and stems of all descriptions, from solid silver stems down to pessaries made of gutta-percha covering copper wire, and with no benefit; in fact, she was daily getting worse. In this case I used *two* tampons saturated with the solution, one much smaller than the other, so that it would occupy a position supporting the fundus, well up in Douglas' pouch, while the other and larger tampon was placed behind the cervix, and acted as a support to the smaller. After three months she was able to endure considerable fatigue, and eat and digest satisfactorily, and sleep well, feats she could not perform before; and at this moment I know she enjoys life thoroughly.

I think it often a good plan to employ two tampons in retroflexion and also in antelexion, but, as a rule, one answers all the purpose. It is gratifying to observe the speedy effect of this treatment on the bladder symptoms in anteversion and antelexion. I think I need hardly enter into further details as to the method of treating other varieties of displacements.—*Edinburgh Med. Jour.*

ADVICE TO DOCTORS—BY DR. CATHILL.

Do not let your wife or any one else know your professional secrets, nor the private details of your cases, even though they are not secrets; nothing is more mortifying or hurtful to the feelings of patients than to hear that the details of their cases are being whispered about as coming from the doctor or those he has told. If you allow yourself to fall into the habit of speaking too freely of ordinary affections, or submit to be indiscriminately interviewed concerning your patients, your very silence in disreputable cases will betray them. The credit of whole families and the character of its individual members will sometimes be at stake, and unless you shut your eyes and do not see too much, also your mouth, and do not say too much, it may ruin them and involve you. You will be allowed to see people in a very different light from that by which other people view them. The community see one another with a veil over their moral and

physical afflictions, over their blasted hopes and the sorrows that flow from love and hatred, their poverty and their crimes, their vexations and their solitudes; *you* will see the deformities, debilities and deficiencies with the veil lifted, and will become the repository of all kinds of moral and physical secrets. Observe reticence at your visits, and do not mention the private affairs of anybody from house to house. Seal your lips to the fact that patients have or ever had venereal diseases, hemorrhoids, fistula, ruptures, leucorrhœa, constipation, or that abortions, private operations, etc., have taken place, or that any one takes anodynes or liquor, or has this, that or the other bad habit. No matter how remote the time, if patients wish their secrets told, let them do the telling. You have no right to tell the affairs of patients to any one without their consent. But while silence should be your motto, it is your duty to society and to the laws to expose and bring abortionists and unprincipled quacks and heartless vampires, whether acting under cover of a diploma or not, to justice, whenever you meet proof of their wicked work.

In prescribing medicines for the sick it is better to confine yourself to a limited number of remedies with whose uses and powers you are fully acquainted, than to employ a larger number of ill understood ones. When you order unusually heavy doses of opiates, etc., instead of using the common signs, take care either to write the quantity out in full or to underscore both name and quantity. It is safer also to put the names of heavy-dose patients on their prescriptions. When you order morphia, etc., in unusually large doses, it is well to have it made into pills or granules, and direct the druggist to "put them into a bottle." It is so unusual to dispense pills in a bottle that it informs the compounder that the quantity is not a mistake but is as intended, and guards patients and attendants against taking or giving them in mistake. When you prescribe pills, powders, etc., for sailors and persons whose business exposes them to get their medicines wet or wasted, it is better to direct them to be put into bottles or tin boxes instead of paper boxes.

A placebo or tentative remedy should, as a rule, be small and easy to take. A very good form is prepared thus: Purchase a pound box of No. 35 unmedicated homœopathic globules, which cost but 35 cents, and immerse one half of them in fluid ext. of belladonna, and the other half in compound tinct. of iodine, for twenty minutes, then roll them about on a newspaper till all surplus fluid is absorbed, and let them dry; after which they can be put into bottles, with a small quantity of powdered cinnamon in one bottle and powdered liquorice root in the other to prevent agglutination. These can either be given as globules, or put between paper, crushed, and given as powders; they make cleanly,

convenient placebos for office use, and cost so near nothing, and a pound will last so long, that you can afford to give them away and charge such patients for advice only. They will suit almost any case requiring a placebo. Be careful to keep a straight face and to give minute directions concerning the manner and time of using inert remedies given simply to amuse people who are morbid on the subject of health, and you will do them double good. You will not only find that your placebos amuse and satisfy people, but you will often be surprised to hear that some full-of-faith placebo-takers are chanting your praise and are actually willing to swear that they are cured of one or another awful thing by them; cheated into a feeling of health by globules, or teaspoonful doses of flavored water, or liquorice powder, as by a charm; some who seem to be magically benefited by a teaspoonful of—nothing—will actually thank you for saving their lives. What a sad comment on the discerning power of the nineteenth century! What a sad fact for legitimate medicine! What a gold mine for quackery! Just here let me impress a caution: Take care that seeing cases get well thus does not create in your own mind unconscious deception, and lessen your belief in the necessity for medicine in real sickness, and modify or destroy your usefulness when medicines are required. Never send a patient to the drug store with a prescription for bread pills. It is not right to make any one pay for bogus medicines; besides, if, from among all the articles in pharmacopœia you cannot devise some trifling placebo that is more plausible than bread pills, you must have an unusual paucity of resources. Moreover, were a patient to discover that he had been paying for such a thoroughly insipid cheat, he would naturally feel victimized and indignant.

Never solicit people, either by word or manner, to employ you; for such a course would surely either repel them or prevent your enjoying the necessary esteem. Many people are naturally capricious and fickle, and, no matter how earnestly any one tries to serve and satisfy them, they will change about from one to another. Others are more true, and will adhere to you through everything, good or bad, with surprising tenacity. You should, however, always found your hope of being retained upon deserving it. Do not set your heart or faith upon the continuance of the patronage of any one, for you will many a time be replaced by those you know to be far below you in everything that unites to make a good physician. Sometimes you will be unexpectedly and unjustly dropped out of a family, and the most ignorant or shallow fellow in the whole section, or an old lady, or a homœopath, will supersede you, and you may have to bear the reflection and the wrong without showing the slightest chagrin. Ability to promptly detect loss

of confidence or dissatisfaction with either yourself or your remedies is one of the acquirements that *you* must seek to attain, if you do not already possess it.

A patient has a legal right to dismiss you from a case, and you have also a perfect right to relinquish attendance on him at any time. Indeed, you may sometimes find yourself so hampered or harassed, or maltreated in a case, that to retire from it is your only alternative. Whenever dismissed from a case, consider attentively the combination of circumstances that conspired to produce the dismissal, and how you might have averted it, that you may gain additional familiarity with the art of satisfying and retaining patients. Some people, indeed whole families, who will almost idolize you as long as you are lucky and have neither unfortunate cases nor deaths in their families, will turn as rudely and maliciously against you as soon as either occurs—as if you kept the book of life and controlled the hand of God. When you are unjustifiably dismissed from a case, especially if it is to make room for an irregular doctor, do not tamely consent to be thrown aside in such a manner. Express your perfect willingness and your determination to retire, but make it known in a gentlemanly way that treating you thus wounds your sensibilities, and that such action necessarily casts undeserved reflection on you and does your reputation a very great injury. Such a protest will secure for you greater respect, and will counteract the injury following your dismissal better than if you meekly submit without protesting.

THE following story of Sir James Paget is going the round of the newspapers. The well-known surgeon has a country house in Kent. A few days ago, as he was out walking, he witnessed a serious accident. Two men were driving in a cart, when one of them fell out, and, the wheel passing over him, broke his leg. Sir James, with a kindness which belongs to his profession, had the man lifted into the cart, and proceeded to do what was required to be done. In the meantime the poor sufferer's companion hurried off to the local medico, whom he addressed in this fashion: Please, sir, Bill has been and fallen out of the cart and got his leg broke; there's an old cove a-pulling of him about, but I can see he ain't up to much, so I wants you to come at once, sir, 'cos Bill's wery bad." The doctor hastened to the scene, and discovered at once, to his surprise, that the "old cove" was Sir James Paget, who in the interim had improvised some splints and bound up the leg with a copy of the *Times* newspaper.

Thomas Keith, of Edinburgh, has recently removed the uterus for prolapsus. The result was good, as most of his results are.]—*Am. Med. Digest.*

MULLEIN PLANT IN THE TREATMENT OF PULMONARY CONSUMPTION.—F. J. B. Quinlan, M.D., M.R.I.A., F.K.Q.C.P., Physician to St. Vincent's Hospital Dublin, observes that "from time immemorial the *Verbascum Thapsus*, or Great Mull-ein has been a trusted popular remedy in Ireland, for the phthisis." After relating seven cases where it proved of benefit, he concludes, "I have set down the above cases simply in the order in which they occurred, and with no view of supporting any preconceived idea. These cases, although too few to justify any general conclusion, appear to establish some useful facts. The mullein plant boiled in milk is liked by the patients; in watery infusion it is disagreeable, and the succus is more so. The hot milk decoction causes a comfortable (what our Gallic neighbors call *pectorale*) sensation, and when once patients take it they experience a physiological want, and when the supply was once or twice interrupted, complained much in consequence. That it eases phthisical cough, there can be no doubt; in fact some of the patients scarcely took their cough mixtures at all—an unmixed boon to phthisical sufferers with delicate stomachs. Its power of checking phthisical looseness of the bowels was very marked, and experiment proved that this was not merely due to the well known astringent properties of boiled milk. It also gave great relief to the dyspnoea. For phthisical night-sweats it is utterly useless; but these can be completely checked by the hypodermic use of, from the one-eightieth to one-fiftieth of a grain of the atrophia sulphate; the smaller dose, if it will answer, being preferable, as the larger causes dryness in the pharynx, and interferes with ocular accommodation. In advanced cases, it does not prevent loss of weight, nor am I aware of anything that will, except koumiss. Dr. Carrick, in his interesting work on the koumiss treatment of South Russia (page 213) says: 'I have seen a consumptive invalid gain largely in weight, while the disease was making rapid progress in her lungs, and the evening temperature rarely fell below 101° Fahr. Until then, I considered that an increase of weight in phthisis pulmonalis was a proof of the arrest of the malady.' If koumiss possessed this power, mullein clearly does not; but unfortunately, as real koumiss can be made from the milk of the mare only, and as it does not bear travelling, the consumptive invalid must go at least to Samara or Southern Russia. In pretubercular and early cases of pulmonary consumption, mullein appears to have a distinct weight-increasing power; and I have observed this in several private cases also. Having no weighings of these latter, however, makes this statement merely an expression of opinion. In early cases, the mullein milk appears to act very much in the same manner as cod-liver oil; and when we consider that it is at once cheap and palatable, it is certainly worth a trial. I will continue the research

by careful weighings of early cases; and will further endeavor to ascertain whether the addition of mullein to the cultivating solution prevents the propagation of the phthisical bacillus."—*British Medical Journal*.

TREATMENT OF DYSENTERY.—Mr. F. Rawle, M.R.C.S., observes that, at the present time, when dysentery is very prevalent, especially amongst those who have returned from the Egyptian war, any suggestion that may mitigate the suffering of so fatal a malady will be hailed with gratitude. The plan he has used with most success is the following. First, having placed the patient between warm blankets, a pint and a half of warm water, at a temperature of 90° Fahr. is injected. This is seldom retained longer than a few minutes, but is pronounced very grateful to the patient. When the water has soothed the mucous membrane of the colon and rectum, and brought away any *effete* matter, two ounces, by measure, of the following enema is administered with a gum-elastic bottle. R Quinine sulphate ten grains; compound tincture of camphor four drachms; decoctum amyli to two ounces. Mix, and when about milk-warm, inject, which is generally retained; but, if ejected, it may be repeated after an hour or two. This has been found of great service, and very grateful to the patient, the effect is like magic. If griping pains be felt over the region of the epigastrium, half-drachm doses of chlorodyne, in some aromatic water, mint, carraway, or aniseed should be given. The diet, of course, should be of the most soothing kind; jellies, isinglass, linseed, toast and barley *ad libitum*. Ipecacuhana appears of little service, and Mr. Rawle has discarded it from his treatment. Warm turpentine stupes on warm flannels, over the hypogastrium prove very beneficial.—*British Medical Journal*.

TUBERCLE BACILLUS AND PHTHISIS.—Dr. T. Henry Green (Physician to Charing Cross Hospital, and Senior Assistant-Physician to the Hospital for Consumption and the Diseases of the Chest, Brompton), in concluding a lecture on the relation of this micro-organism to phthisis, observes, with regard to treatment: "What is the practical teaching of Koch's discovery with reference to the prevention and cure of phthisis? If our pathological conclusions be even only partially true, they clearly indicate, I think, the necessity of carefully distinguishing between the bacillus and the conditions which favour its influence, and of directing our treatment to both. We must endeavor to prevent the access of the organism, and, if possible, to destroy it after it has effected an entrance; and we must also strive to maintain a healthy condition of the pulmonary tissues, and thus prevent the occurrence of that tendency to apical stagnation which appears to be such an important, if not essential,

factor in the disease. The latter of these indications is, I believe, as important as the former; and it is, perhaps, rather in danger of being lost sight of in the very natural eagerness with which attention is now being directed towards the bacillus.

"Firstly, then, with regard to the condition of the lung which favors the influence of the bacillus. Here it is only necessary to remark that, whatever promotes a vigorous state of health will, by improving the condition of the blood, the nutrition of the vessels, and activity of the circulation, and the exercise of the respiratory function, tend to prevent that stagnation and transudation in the highest portions of the lungs, the etiological importance of which we have so especially insisted upon. The value of treatment which has for its object the fulfilment of these indications in the prevention of phthisis it is, I believe, difficult to over-estimate; and its usefulness is almost equally valuable when the disease is established. I cannot but think that, in the meantime, such treatment promises better results than any attempts to attack the specific organisms. Secondly: the tubercle bacillus. The consideration of this naturally divides itself under two heads: (a) the prevention of its access, and (b) attempts to destroy it when the disease is developed. (a) The prevention of the access of the bacillus. The present position of our knowledge appears to point to the desirability of adopting measures for the disinfection and destruction of the sputa of patients suffering from phthisis; and perhaps, also, of the alvine secretions, when there is any evidence of tuberculous disease of the bowel. It also raises the question as to how far it is desirable to allow individuals who are not consumptive, but who inherit a phthisical tendency, and especially when such individuals are out of health, to intimately associate with those who are suffering from the disease. If our pathology continues to move on the same lines, this subject may become one requiring the consideration of those who manage our hospitals. (a) The destruction of the bacillus after the disease is established. Attempts to do this are made principally by means of antiseptic inhalations. This is the fashionable, though perhaps somewhat misdirected, therapeutics of the day. A respirator charged with some antiseptic, such as creasote or carbolic acid, is now being largely used in the treatment of phthisis. Although I should be very sorry to unfairly criticise such treatment, I cannot but think that the evidence that its usefulness is in any way dependent upon its destruction of the bacilli, or of any infective substance which they may originate, is wanting. It seems to me much more probable that such inhalations, when beneficial, are so mainly through the favourable influence which they exercise upon the mucous membrane and secretion; and when, as is so often the case, they are combined with chloroform, they will also act as direct sedatives.

What we want are cases of early and progressive phthisis in which antiseptic treatment alone, without adjuncts, is followed by marked improvement. When it can be shown *e. g.*, that the pyrexia of early phthisis is reduced by such treatment, we shall have evidence pointing to the influence of the germicides upon the bacillus of considerable value. We are now making some observations in this direction, but, at present, with negative results. Whilst, therefore, I do not wish to be understood to discourage the treatment of phthisis by antiseptic inhalations, I think we must be careful as to the interpretation we put on their results. The treatment of phthisis and of other pulmonary diseases by means of medicated atmosphere has been greatly stimulated by Koch's discovery. Such treatment has undoubtedly been too much neglected in the past, and its prosecution promises the best results. But, in the meantime, I think we have no evidence that we are able by such means to influence the tubercle bacillus; although, if Koch's investigations be true, the discovery of some agent which, by destroying it, will arrest its injurious influence, is obviously the greatest desideratum."—*British Medical Journal*.

DIALYZED IRON.—Dr. Prosser James has lately said, in a summary of the position which dialyzed iron is entitled to hold in medicine, that the persalts of iron are frequently employed solely on account of their astringency, while the protosalts are occasionally considered as being destitute of this quality. The freshly-prepared carbonate is an excellent mild chalybeate, but difficult to keep in an unaltered state, so that preference is given to reduced iron. The scale preparations of iron are held in repute, both from the extreme facility of their use, and their agreeable taste. When these three forms of iron are inadmissible, dialyzed iron may be resorted to with admirable effect. It is a milder chalybeate than the three preceding, and does not produce the slightest irritation.

A recent analysis by Professor Tichborne of Wyeth's preparation agrees almost exactly with Graham's statement, that dialyzed iron contains 98.5 parts of the oxide and 1.5 parts of hydrochloric acid. The liquid thus obtained differs altogether from an ordinary solution of salts of iron, by its not giving rise to the blood-red color on the addition of alkaline sulphocyanide, nor to the blue precipitate with ferrocyanide of potassium. It does not become cloudy on boiling, nor when agitated with two parts of ether and one part of alcohol is the ether layer colored yellow. It is so sensitive that ordinary spring water will cause a precipitate, yet no precipitate is produced by nitric, acetic, or muriatic acid. Graham's solution gelatinized in about twenty days, and he regarded it as a solution of colloid ferric hydrate which, he considered, existed in both a soluble and insoluble form. It is,

however, never free from chlorine. Theoretically, therefore, the liquid is a solution of a basic oxychloride, but it can never be imitated by dissolving saturated solutions of the hydrate. All these artificially-made liquors are astringent, with ferruginous taste and acid reaction. Respecting the therapeutic value of dialyzed iron, of which there has lately been some inclination to doubt. Dr. James says there is no question. By the method now followed of counting blood-corpuscles, it is found that the taking of dialyzed iron both increases their number and improves their condition. Dr. James gives, as an average dose, twenty to fifty drops, daily, in three doses. Dr. Weir Mitchell, of Philadelphia, gives as much as a drachm at a time. Specimens have appeared in the market which are not only innocent of any acquaintance with a dialyzing membrane, but seem little else than diluted solution of perchloride of iron.—*Chem. and Drug.*

EXTIRPATION OF THE UTERUS FOR PROLAPSE.—Dr. Duvelius (*Centralb. f. Gynakol*) reports the case of a woman operated upon by Dr. A Martin in Berlin. She was forty-six years of age, and had first menstruated at the age of seventeen. At twenty-two years of age she gave birth to a large child, the labor being normal. Thirteen days after delivery prolapsus began to be noticeable to her, and after a time it became excessive. The cervix was amputated afterward, and anterior kolporrhaphy was performed at one sitting, and posterior kolporrhaphy and perinæorrhaphy at another. The operations were complete failures; the parts projected to an exaggerated degree, and had undergone extensive erosion and ulceration. In this condition she presented herself at Dr. Martin's polyclinic. Another anterior and another posterior kolporrhaphy were determined upon; but, when the patient was anesthetized, an entirely retroflexed uterus was found to be so completely surrounded by the remains of a perimetritic inflammation that total extirpation alone seemed practicable. After disinfection of the field of operation, incision was made around the remnant of the *portio vaginalis*, which was followed by free hemorrhage. The uterus was then drawn well downward, and an elastic ligature was placed around it. Douglas' pouch was next opened, as the uterus was detached at that aspect with scissors, knife, and fingers. In a similar manner the separation was made anteriorly. The uterus being now dragged forcibly downward, three ligatures were passed upon either side to secure the vessels, after which they were cut away. The stumps of the ligaments were brought down through the wound, and a series of both and superficial sutures was passed, securing the cut edges of the peritoneum and of the vagina. The operation was followed by peritonitis, but the patient evidently recovered. Anterior and posterior kolporrhaphy were subsequently performed,

and the patient was believed to be entirely cured.—*N. Y. Med. Journal.*

URETHROTOMY IN CYSTITIS. Chronic Cystitis with enlarged prostate in advanced life, requiring the regular use of the catheter for the evacuation of the urine, not unfrequently becomes aggravated by the very process of catheterization, and an irritable condition of the bladder is produced, whereby the more frequent use of the instrument is necessitated, being sometimes required as often as every hour or even oftener.

It was proposed years ago to perform the same operation as that required for stone for the relief of this trouble, with the idea of giving rest to the bladder, by preventing the accumulation of urine, but the success attained was not such as to place it beyond question as a proper procedure.

Sir Henry Thompson has now devised an operation by which he accomplishes the end desired, that of rest to the bladder and urethra, and which he describes as follows:—The patient, under ether, is placed in the lithotomy position, and a grooved median staff introduced into the bladder. A small vertical incision is then made in the raphè, just above the anus, only large enough to admit the index finger, and ending in the staff at the membranous portion of the urethra, which should be divided for half an inch at most. The staff is then withdrawn, and a large vulcanized catheter or tube about No. 20 (English scale), is inserted, with the end just within the bladder, and securely tied by means of a tape or a bandage around the waist. This is allowed to remain in for several days. The relief obtained, he says, is immediate and remarkable. The urine which had contained mucopus and blood, and was alkaline and offensive, changed in a few hours and became natural in color, acid and almost clear. The catheter was removed on the eighth day, and healing of the perineal wound was rapid. Six months afterwards there had not been a return of the troublesome symptoms. This operation, which he says is only a very limited urethrotomy, he regards as a very safe and simple proceeding. Of course it has no effect in diminishing the size of the prostate, so that with the healing of the external wound, resort must be had to the catheter as formerly.—*Medical Review.*

LIGATURES AND SUTURES.—The following is an extract from a recent communication by Dr. E. J. Kempf to the *Medical Herald*:—Professor S. Gross gave it as his experience that the surgeon's silk is the best material for ligatures and sutures. It answers all the purposes of a suture except, perhaps, in a few particular instances, as in operations on the perineum. He uses the surgeon's silk suture altogether; in this differing from Drs. Agnew Ashhurst, who use the silver-wire suture in

preference to all others. As a ligature, says Dr. Gross, the surgeon's silk has no superior. It should be good silk and should be waxed before using. Cat-gut and other animal ligatures will be found useful in exceptional cases, as in operations in the abdominal cavity, etc. For such cases, Dr. Gross prepares his own cat-gut ligature in the following manner: Buy violin strings E No. 7, put them for two weeks in a mixture of chromic acid solution and carbolyzed glycerine in the strength of one part of the acid to five of the solvent. The adhesive plaster that Dr. Gross uses exclusively in connection with the sutures, and for all other purposes, is Mead's as manufactured by Seabury & Johnson, of New York.

The following points are culled from the lectures of Prof. W. Goodell, in the University Hospital:—Dr. Goodell does not operate in laceration of the cervix, if the sides of tear are in apposition—that is, lie parallel and are not turned up. In erosion of the cervix he recommends the local application of collodion in which iodine has been dissolved, or the strong tincture of iodine may be used. In carcinoma of the uterus Dr. Goodell applies locally the tampon soaked in a glycerole, and gives constitutionally ten drops of Fowler's solution before meals for the cancerous cachexia and twenty drops of fl. ext. ergot several times a day to prevent too much bleeding. After every operation on the uterus Dr. Goodell applies a tampon, cup-shaped, in which glycerine is poured. He also instructs the patient how to do this. Dr. Goodell's favorite local applications for endometritis and other similar affections of the uterus are: 1. A mixture of one ounce each of iodine, chloral, and carbolic acid. 2. One drachm of pure carbolic acid to one ounce of glycerine. 3. A saturated compound tincture of iodine. 4. A solution of nitrate of silver of one drachm to the ounce.

HOW LONG SHOULD THE SUBJECTS OF CONTAGIOUS DISEASES BE ISOLATED?—The Academy of Medicine of Paris, after a careful study and report of a special commission, has given the following answer to the above enquiry. (*Gaz. Med. de Paris*).

1. Pupils affected with chicken-pox, small-pox, scarlet fever, measles, mumps, or diphtheria, should be strictly isolated from their comrades.

2. For small-pox, scarlet fever, measles, and diphtheria, isolation should not be shorter than forty days; for chicken-pox and mumps, twenty-five days is enough.

3. Isolation should last until after the patient has been bathed.

4. The clothing worn by the patient at the time he was taken sick, should be subjected to a temperature of 90° C. (194° Fahr.), and to sulphur vapor and then well scoured.

5. The bedding, curtains, and furniture of the sick-room should be thoroughly disinfected, washed, and aired.

6. The pupil of a school, after recovery from one of the above contagious diseases, should not be readmitted to the school unless furnished with the certificate of a physician that the above precautions have been observed.

CHLORAL HYDRATE IN DIPHTHERIA.—The *New York Medical Times* in a report of a meeting of the medical society of Northern New York says that an extract from a letter written by Dr. Allen, of Lawyerville, was read by the secretary, showing that a solution of *hydrate of chloral*, from fifteen to thirty grains to the drachm of water, the strongest solution being employed in adult cases, would speedily remove diphtheritic deposits from the throat. It is applied by means of a brush, at intervals of two or four hours. The doctor states that the densest coating of membrane seldom resists the second or third application. We commenced the use of chloral hydrate in severe cases of diphtheria about five years ago and have used it in quite a number of very severe cases with the most satisfactory results. Will some of our readers try it and report results?—*Med. Summary*.

TREATMENT OF EPILEPSY.—Dr. Saundby read a paper on the treatment of Epilepsy, before the Midland Medical Society, in which the following points were insisted on: (1) The value of combining the bromides of potassium, sodium and ammonium, as recommended by Professor Brown-Sequard; (2) The advantage of adding digitalis, and sometimes theine, to the mixture to counteract the depressing influence of the bromides; (3) The utility of zinc as an adjuvant in the treatment; (4) The successful use of borax in some cases of obstinate epilepsy; (5) The value of theine, caffeine and nitro-glycerine in the treatment of epileptic vertigo.—*British Medical Journal*.

RADICAL CURE OF RUPTURE.—The secret methods of cure practiced by Dr. George Heaton successfully in one hundred and forty cases is now, after his death, published by Dr. J. H. Devonport. He injected extract of quercus alba into the hernial canal outside the peritoneal sac, to excite a mild degree of irritation in the tendons and fasciæ, so as to lead to contraction. No fatal results followed nor any serious complication. It often cured, and when it failed great relief was obtained, so that a light truss sufficed to support the protrusion.—*Low Medical News*.

TREATMENT OF RINGWORM OF THE SCALP.—Dr. Adler Smith recommends oleate of mercury with ung. petrolei (ten per cent) in chronic cases of tinea of the hairy scalp. This causes less irritation than the ordinary preparation, and children bear it well, although if the cases are under seven years of age it may be found necessary to dilute it further.—*British Medical Journal*.

A PIECE OF STEEL REMOVED FROM THE EYE BY THE ELECTRO-MAGNET.—On July 20th, while at work, a young carpenter came to the hospital with a chip of his chisel in the left eye. On examination by focal illumination, the piece of steel could be seen in the anterior chamber, touching the iris in the lower outer quarter. After an ineffectual attempt to remove it, the patient was again put under ether, and an incision made through the cornea, near the sclerotic junction. The pointed pole of the magnet (described below) was made to touch the lips of the incision, and the battery connected; the foreign body flew up, attached itself at once, and was extracted with the greatest ease. Very slight iritis followed, and the eye was perfectly well in seven days. The magnet used was the ordinary bar (with a coil round it), shaped like a small horseshoe, by the ingenuity of Mr. Gordon, of the Cambridge Physical Laboratory. The poles were prolonged into sharp iron points, something like a crab's claw, fixed about half an inch apart, one longer and sharper than the other. These points were movable, being screwed into the magnet-poles, and in no way spoiled the magnet. The whole apparatus was adapted in about an hour's time. The battery used was a five-celled Groves. I send an account of this case, to show how an ordinary electro-magnet may be adapted for such cases, with little expense or trouble.—G. Wherry. —*British Med. Jour.*

TREATMENT OF INTERNAL HEMORRHOIDS.—The following case coming under the above heading aptly proves the use of its subsequent treatment: J. F., aged sixty. I found him suffering from internal piles with prolapsus ani and severe hemorrhage on defecation, or even on walking. He had given up all work. I prescribed the ordinary remedies for three weeks; but as it was quite useless, and the man became so weak from the pain and loss of blood, and the prolapsed bowel, with its congested mucous tissue, so difficult to return, I determined upon the following: I applied a ligature steeped in carbolized oil to the base of a large hemorrhoid, and touched the surrounding vascular membrane with nitric acid, anointed the parts with simple lard, and then with firm pressure replaced the bowel. I kept him on fluid nourishment, with opiates occasionally for a time, and in a month he was about again in good health.—*Mr. T. Wells Hubbard in British Medical Journal*

ASTHMA MIXTURE.—

R Tinct. lobeliae, 3 v,
Ammonii iodidi, 3 ij,
Ammonii bromidi, 3 iij,
Syr. tolutani, 3 iij, M.

Sig.—Teaspoonful every one, two, three or four hours. This gives relief in a few minutes, and sometimes the relief is permanent.—*Fothergill.*

TRENDELENBURGH'S METHOD OF AMPUTATION AT THE HIP JOINT.—In the American *Medical Journal* Dr. VARICK of Jersey City Hospital describes an amputation at the hip joint, which was successful mainly through the saving of blood by using Prof. Trendelenburgh's method of preventing hemorrhage. This method requires a flat steel rod a foot long and 1-4 inch wide, with a movable lance-shaped point, the rod to be bi-convex on section, one-fourth of an inch thick in the middle, with blunt but smooth edges. This rod is thrust obliquely through the soft parts in front of the joint, in the same way as the two-edged knife in the well known method of Lisfranc, but nearly an inch higher. The rod enters 1½ in. below the anterior superior spinous process of the ilium, passes between the femoral artery and the bone and emerges at the fold of the scrotum. The point being removed, an elastic band is firmly wound figure-of-8 fashion around the projecting ends of the rod, compressing effectually the great vessels. Lisfranc's knife is then introduced a little below the rod and by cutting from within outwards in the usual way the anterior flap is formed. The vessels being tied, the band and rod are removed and the joint disarticulated and the posterior flap formed. The patient made a good discovery.—*Pacific Med. and Surg. Journal.*

INCONTINENCE OF URINE.—For incontinence of urine in children, Dr. Janeway (*Medical Record*) recommends a combination of ergot, belladonna and iodide of iron.

R Tinct. ergot, 3 ij,
Tinct. belladonna, 3 j,
Syr. iodide iron, 3 j,
Simple elixir, 3 j. M.

Sig.—One teaspoonful morning, noon and bedtime to a child ten years old.

The College and Clinical Record publishes the following anecdote of Jenner: The celebrated Dr. Jenner, who introduced vaccination, was a man of genial wit, and the following lines addressed to a lady upon the recovery of her daughter, and sent with a pair of ducks, affords a specimen of his facetious vein:

"I've despatched, my dear madam, this scrap of a letter, To say that Miss——is very much better, A regular doctor no longer she lacks, And therefore, I've sent her a couple of quacks."

A case of cirrhosis of the liver in a child aged three and a fourth years was shown by Dr. H. R. Hutton at a late meeting of the Manchester Medical Society, England.

UNWISE.—The decree by virtue of which the retirement of college professors in France has been enforced on their attaining the age of sixty-five has been abrogated.

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ALCOHOL AS A THERAPEUTIC AGENT.

In the halcyon days when "ignorance was bliss," and it was "folly to be wise," no one ever doubted the curative properties of alcohol. Whether for better or for worse, we of to-day, live in a time remarkable for its spirit of eager inquisitiveness. No theory however hoary with age, or no practice however honored by usage, is safe from its daring intrusion, or can, by any means elude its still hunt, every theory is placed in the crucible, and every practice submitted to searching inquiry. Formerly, alcohol was thought the royal thing, a sort of cure-all, and no serious illness was passed through without invoking its aid. But science is abroad in the world, and clinical observation is wide awake, so that even with alcohol things are not as they used to be. Now, the prudent physician hesitates, and ponders well, before he prescribes alcoholic stimulants. Hundreds of the best men in the profession, scattered over different countries, have discarded its use altogether. And, worse still—for the good old times, this change is led by the very men whom the profession specially delight to honor, and whose utterances as touching other matters, are regarded as almost oracular. Amongst such may be named, Dr. W. B. Carpenter, the great physiologist and author, Dr. Benj. Richardson, the thoughtful physician, and painstaking investigator, and others equally illustrious, whose names are familiar to every reader. Every observer must have noticed the setting in of a counter current to the more extravagant claims set up for alcohol as an alleged therapeutic agent. Time

has only served to increase the force and volume of that current. The question has steadily pressed on to the front, until now it forces itself upon us in such a way as to make escape no longer possible. The revelations of clinical experience no less than of science admonish us to call a halt, to take, at least, a hasty survey of the ground on which we stand. Considering the potency of this agent, it may be within certain limits, for good, but most certainly for evil; and considering also the enormous quantity consumed under the guise of medicine, it is safe to say, that this problem to-day overshadows all others combined, in the domain of therapeutics. Neither preconceived opinions nor confirmed prejudices, should, for one moment, be permitted to become barriers to a free and frank discussion, from all sides. We are rapidly reconstructing our materia medica, partly it is true on well ascertained results of clinical experience, but chiefly on the basis of the twin sisters, physiology and chemistry. Most of what is exact in treatment we have derived from these branches, and if medicine is ever to extricate itself from the labyrinths of uncertainties and guessings, to take a more conspicuous place as one of the exact sciences, it will be through the unerring revelations of these branches, aided of course by clinical study, and not by the whims of boasted "success," or "long experience" of any set of men however gifted by nature or honored by their fellow men. Mere dogmatic statement no matter how well supported by numbers, must ultimately yield to scientific truth.

In its royal march, science has swept aside many an ancient cobweb. Many articles once prized as medicines of extraordinary power now have no place in materia medica, and are only spoken of as monuments of the folly of our forefathers. In the light of the past history of therapeutics, who is bold enough to assert that alcohol shall not have a similar fate. We cannot close our eyes to the fact that leading scientists and foremost investigators, keep affirming and re-affirming, that alcohol is a poison under all circumstances and never remedial. Other than these we have no sure guides. The decrees of science are imperial, and when proclaimed with clearness must be obeyed, and above all, by medical men, who themselves are the devoted disciples of science, bees in the hive of research, and ever in the vanguard of progress. The proposal to abolish alcohol from our

therapeutics is revolutionary it is true, but what cares science for that. Science is a truth-seeker and never frets about consequences. Besides, the proposal is, perhaps, no more revolutionary than was the proposal at the time to abolish venesection, as a universal cure. At all events, we are in duty bound to examine closely what science and critical observation have to say on this important question.

All will admit that it is too late in the day to discuss alcohol as an article of daily regimen. No man of standing will risk his reputation by advocating such a practice. However deep-rooted as a social custom, it no longer rests on a belief in the life-giving properties of alcoholic stimulants of whatever form. The causes of the evil are to be sought in other directions. That paradoxical position, namely, the beneficial effects of alcohol under opposite conditions of heat and cold, has also been abandoned; the one by arctic explorers, and the other chiefly by army experience. Science comes forward and gives the reasons in both cases, and we find such reasons in harmony with known facts. Furthermore, it is conceded on all sides that alcohol has had too wide a range in our therapeutics in the past, and that its scientific application lies within much narrower limits. However grotesquely practice is made to harmonize with theory, there can be no doubt about a unanimity of opinion on the foregoing points amongst medical men generally. This marks a wide departure from old theories, a long stride toward the adoption of more advanced views. Notwithstanding these concessions to advanced science, the majority of medical men hold that alcohol is remedial and restorative within certain limits. The prevailing views may be succinctly formulated under two propositions, as follows: 1. Alcohol may be, and is beneficial, under conditions of temporary exposure, or sudden and unusual strain, calling for the temporary exercise of all the vital energy the system can be made to give forth, in a state of health. 2. Alcohol may be, and is beneficial, in failing vital energy, in a state of disease. In the one, life is endangered from without, and the other from within.

As before stated, many have gone so far as to banish alcohol altogether as a therapeutic agent, but we think the above propositions fairly present the views of an overwhelming majority of the medical men of the day. It is but fair to state, how-

ever, that majorities are not always safe guides. More especially is this true in a case like the present, where the question is one of science, demanding careful investigation, and perhaps, a forsaking of long-cherished convictions and deep-rooted prejudices.

Turn we now to what the scientists have to say about this question. Amongst these none is more prominent than Dr. W. B. Carpenter, who has recently been on a visit to Canada and the States. Previous to his return to England he delivered a lecture on alcohol in Tremont Temple, Boston, Mass. In a report of his utterances he is committed to the following views:

Alcohol diminishes the solvent power of the gastric juice, and any temporary increase in the quantity secreted is followed by subsequent diminution. Alcohol is prejudicial to the normal healthy life current. The introduction of alcohol changes the healthy aspect of the red corpuscles, upon the normal condition of which the system depends for its oxygen and the removal of carbonic acid. Alcohol produces an irregular outline of the corpuscles and causes them to run together in the circulation. This tendency of the corpuscles to aggregate under the influence of alcohol, interferes with the rapidity of oxygenation, and consequently with the whole respiratory process. The action of the heart is reduced from the same cause. The result of many observations discloses that alcoholic poison deranges the system. It interferes with the process of eliminating the waste matter from the system, and hence tends to the accumulation of effete matter in the blood. It checks the healthy action of perspiration. The human body is an automaton, the mechanism of which the brain has the power to set in motion. Alcohol weakens and ultimately destroys the faculty of automatonism, and intensifies the tendency towards any particular abnormal action.

Our present object being to simply pass in review the various phases of this important question, and to present with some degree of definiteness its *status*, we forbear all comment, and would only remark; that as an arraignment of alcohol, anything more sweeping than the above it would be impossible to conceive. In view of so much that is complicating and perplexing, and in view too of the weighty social considerations involved, and while awaiting fresh developments, though not called upon to abandon their use entirely, yet, it is obviously the duty of every physician, to try how long and how well he can succeed without the use of alcoholic stimulants.

THE CLAIMS OF THE PROFESSION ON THE PUBLIC.

It is an old and trite saying that "charity covers a multitude of sins," and certainly the charity which we, as physicians and surgeons, are called upon to exercise in the daily and nightly performance of our duties does cover an enormous multitude of sins—on the part of the public. It is but lately that the Assembly of France, to their honor be it said, passed an ordinance allowing to the family of a physician dying from contagious disease contracted while on hospital duty, a pension equal to that awarded to the family of a soldier dying in battle. This is a step, though a short one, in the right direction, but why did the government not grant an officer's pension in the case described? The soldier loses his life whilst in the act of destroying that of others—enemies, we grant, of his country; whereas the physician loses his in battling a far more treacherous, masked and destructive one—namely, disease. Which, may we ask, deserves the more handsome recognition at the hands of the State? It is not long since the lamented Dr. Anstie met with his death while seeking to discover the cause of an endemic, in order that he might be instrumental in preventing further loss of life. On this side of the Atlantic, but lately, a young physician received into his system those terrible *bacteria micrococci, etc.*, while saving a patient from impending suffocation by laryngo-tracheal diphtheria, by withdrawing mucus, blood and membrane from the wound left after his operation of tracheotomy. Has any one heard of a pension being granted to the families of either of these victims, or even that that cold and costly reward, a mausoleum had been erected to the memory of the deceased? I trow not!

"It was only a Doctor, who's ever ill-paid,
Cover him over with pickaxe and spade."

The poor professional cow (the term is an apt one as we are often individually termed "brutes") has, so to speak, continued too long patiently yielding the milk of human kindness and the cream of good works, and receiving therefor kicks and cuffs, instead of kindness and corn. If those who are served by that animal refuse to provide her with provender, is it not time that she began to forage for herself? Let the public be shewn that this much abused "*cow*" *habet fœnum in cornu*, and will make those who have abused her for so long a

time feel the impression of her brass-tipped horns, if her wrongs are not righted. It is about time that the big public ox received a little goring.

What one of us has not felt his angry passions rise, while listening to the speeches of candidates for the Legislature, or reading the articles of some writer whose brain was as heavily leaded as the type in which his effusions appeared, when these parties would impudently class ours with non-productive callings—such as lawyers, preachers, middlemen, and salaried officials. Now, as each farmer, mechanic or labourer gives a certain value to the State, owing to the services performed by him, is not the over-worked Doctor, who is often instrumental in raising from a sick bed and prolonging the life of one of the former class, worthy of being recognized as productive, indirectly though it be, to the State? "Providence helps those that help themselves." We, as a class have hitherto displayed too little of that *esprit de corps* so necessary to the advancement of any body of workers. Let us turn over a new leaf, or rather take one from the koran of our sister professions—Law and Divinity. Yes! even Divinity, for our reverend friends are not above looking sharply after the "loaves and fishes" while we have put up too long with barely the fishes, small and bad at that sometimes.

We have numerous able representatives in the legislative halls, why not harness them, saddle them and if necessary spur them? Our forbearance has been tried too long already. The public have come to look upon us as their slaves, not as their servants. Is not the laborer worthy of his hire? and what labourer is more worthy than he who braves wind and storm, turns night into day, and risks life and limb in seeking to prolong the lives of others? To this end we claim that an Act should be passed compelling each municipality to be responsible and to pay for all necessary medical and surgical attendance rendered to indigent persons while residing in such municipality. In order to secure this just right let us continue to agitate this question. The memorable signal run up by Lord Nelson called upon every man—not every sailor, not every soldier, not every officer alone—but every *man*, to do his duty. The medical profession has done its duty in the past, and is still continuing to do that duty towards the country; has the latter done its duty to the former? We say, emphatically, No! Then, as is the custom of the day, let us strike, as we should have struck long ago.

THE HOUNSLOW TRAGEDY.

In the early part of the month of January, W. Edwardes, of Hounslow, England, committed suicide under most painful circumstances. About fourteen months ago Dr. Edwardes purchased a half interest in the business of Dr. Whitmarsh, of Hounslow, for £1,800. He soon found, however, that the pecuniary returns which had been promised him were not forthcoming, and besides, Dr. Whitmarsh seemed anxious to make things unpleasant for his new partner, in the hope that he would leave in disgust, or accept a small sum to retire. Things went on in this way until about two months ago, when a married woman named Bignell, laid a charge of indecent assault against Dr. Edwardes. He met the charge with a prompt and emphatic denial, and the woman herself gave a written retraction of the charges, but Dr. Whitmarsh seized upon the opportunity to force a dissolution of business relations, and endeavored to force his partner to accept £500, and to give up the partnership, and threatened to go into the witness-box against him if he did not consent to the arrangement. Dr. Edwardes losing all hope of establishing his innocence under such circumstances, committed suicide by taking a dose of prussic acid. He left a letter strongly asserting his innocence of the charge brought against him by "the morbid imagination of a licentious-minded hysterical woman, and praying for a blessing on his wife, his little boys, and his mother, and ending with the words, "May God curse Michael Whitmarsh." When the particulars reached the ears of the public a mob stoned the house of Whitmarsh and levelled his surgery to the ground, and would have lynched him but for the protection of a *posse* of forty constables. The coroner's inquest resulted in a verdict, that "Dr. Edwardes came to his death from prussic acid administered by his own hand during temporary insanity," to which the jury added the following rider: That he had been driven to this act "by the pressure brought to bear by his partner, Dr. Whitmarsh using the false charge of Mrs. Bignell as a means to drive him to a dishonorable dissolution of partnership."

The investigation brought out the fact that the woman had brought a similar charge against another man two years before, and her previous history bore unfavorably on her moral character, and

also that she was instigated by Dr. Whitmarsh. That gentleman also appeared in the unenviable light of having received a large sum of money for which he did not give an equivalent, but endeavored to get rid of his dupe in order to have an opportunity of repeating the swindle with another victim.

APPOINTMENT OF HEALTH OFFICERS.

It will greatly be regretted if in appointments to the position of health officer in our towns and cities, political considerations be allowed to outweigh personal and professional qualifications. The position is one demanding special knowledge on the part of the incumbent which is not possessed by the majority of general practitioners. The rapid advance in sanitary knowledge and the varied and responsible duties of a medical health officer, are of such a character as to demand the most careful consideration on the part of those who have the appointing power. To successfully and satisfactorily discharge the duties of the office he requires a special knowledge of the subject, good executive ability and rare tact and judgment. These qualities are almost indispensable to success, and yet in how few instances are they taken into consideration in the selection of the candidates. Personal and political considerations are, it is to be feared, the main grounds upon which many of the appointments will be made. The position of health officer will in many cases be one of extreme delicacy, and if he is hampered in the discharge of his duties by consideration of friendship which may have gained him the position, his usefulness to the public will be greatly diminished. Again, he should be adequately remunerated, so as to enable him to devote his whole time to the public service; and he should also be retained in the office so long as he properly and efficiently discharged the duties, for no eligible person would be found willing to sacrifice his present prospects in practice by the acceptance of such an office, with an uncertainty as to its tenure. We trust that wise counsels will prevail, and that the best and most experienced sanitarians available will in all cases be appointed irrespective of private, personal, or political considerations.

Wohler, of Gottingen the well-known chemist is dead.

THE DANGERS OF THE PROFESSION.

The dangers of the medical practitioner being made the victim of a conspiracy has been fully demonstrated by the case reported in our last issue, which has had a further illustration in the Hounslow tragedy, and also in a still more recent case against Dr. Sparrow, of Kells, England. A young woman called upon Dr. Sparrow, complaining of morning sickness, headache and total suppression of the menses for five months. The Dr. suspected that she was pregnant, and refused to give her any emmanagogue medicine until he was satisfied that she was not in that condition. With her entire consent he made an examination which confirmed his suspicion. A few days afterwards he was summoned to answer to a charge of indecent assault. Providentially he was able to produce evidence from three visitors and three servants who were within hearing at the time, that no such outrage could have been committed. The charge was at once dismissed by the magistrates, who were convinced the whole affair was a "plot." It is gratifying to learn that Dr. Sparrow's medical brethren who were satisfied of his innocence, stood faithfully by him in his adversity.

Physicians from the very nature of their calling are unfortunately liable to such "trumped up" charges as these, and cannot be too careful to protect themselves against the whims of the hysterical and the machinations of the vicious among female patients. The only real safeguard is the presence of a third reliable person, especially when any physical examination is to be made. It is a well-known fact that the administration of chloroform or ether develops erotic feelings, which leave such a profound impression on the patient, that she is ready to swear to the occurrence of an outrage during anaesthesia; but it is probably not so well known that hysteria not unfrequently causes such a condition of the mental faculties that the patient can hardly be considered responsible for the correctness of her conclusion or the truthfulness of her utterances.

FALSE AND MALICIOUS LIBEL.

In the January number of the LANCET, we gave a correct statement of the position of Trinity Medical College in the unfortunate Kingstonian Medical School difficulty. We regret to observe

that certain indiscreet journalists are not content with a true statement of the facts, but, overcome with jealousy and envy at the great success of Trinity Medical College, and eager to defame her character, continue to repeat a malicious falsehood which first saw the light in a Kingston newspaper, to the effect that Trinity Medical College had encouraged the Kingston students in their revolt, by offering to take them for half fees, &c. As a matter of fact, neither in the telegram which was sent in reply to the students, nor in the letter of congratulation on the settlement of the difficulties sent by the authorities of Trinity Medical College, was a single word said, nor a hint given, about half fees, nor were any inducements held out to the students to leave Kingston. Any statement to the contrary is utterly and absolutely false, and without the slightest foundation in fact. Such false statements were manufactured out of whole cloth, and for a purpose which it is not difficult to surmise. They were no doubt used by the enemies of co-education as a lever to coerce the Kingston Faculty into harmony with their views. Language is not strong enough to express the mean and contemptible nature of those who originated, and also those who continue to repeat such malicious falsehoods. The publication of such statements constitutes a libel in law, and their repetition is an aggravation of the charge.

THE INTEGRITY MEDICAL AID FUND.—In another column will be found a letter calling attention to the "new departure" in medical practice in this city. We have received one of the company's circulars, and were somewhat surprised to find the names of some of the medical gentlemen who figure so conspicuously as consulting physicians in this connection. The members of the profession in this city have hitherto borne a good reputation for professional uprightness and integrity of character, and we very much regret to see such a prostitution of their high calling as the terms of this circular implies. Members who join the society are entitled, on payment of 20 cents a month for an adult, or 10 cents a month for a child, to the professional services of any one of the *eleven* medical gentlemen named; or the payment of 30 cents a month entitles to both attendance and medicine, or half that amount for a child. Thus has been inaugurated in this city, by some professional

genius who merits the highest niche in the temple of fame, a system of cheap doctoring such as probably the world has never before witnessed. *Only one cent a day for attendance and medicine.* We were in possession of some of the facts regarding the "Medical Aid Fund," a month ago, but refrained from commenting upon it at the time, believing it to have been a hoax concocted by some wag as a take-off on certain members of the profession.

LIQUOR BROM-ARSEN IN DIABETES.—Dr. Theo. Clemens of Frankfort-on-the-Main, advocates the following treatment of Diabetes Mellitus. It consists in the administration of a preparation called liquor brom-arsen, the application of electricity to the liver and other parts of the body and attention to the dietary. Liquor brom-arsen is a solution of arsenite of bromine in glycerine and water; two drops of the solution contains the 24th of a grain of the arsepite. The dose is one to four drops in some water, after meals. The dose is gradually increased until the urine shows a diminution in the quantity of sugar. It is not claimed that it will cure all cases, but great benefit may be derived even in the worst cases.

ELECTRICITY IN EXTRA-UTERINE PREGNANCY.—In the *N. Y. Med. Record*, Feb. 17, 1883, Dr. A. D. Rockwell records seven cases of extra-uterine pregnancy that were successfully treated by destroying the life of the foetus at an early period, with electricity. The cases occurred in the practice of Drs. Thomas, Emmet, Marion Sims, and others, of New York. The constant current was used with one pole introduced to the mass through the vagina, the other over the tumor, externally. The maximum current strength employed was 18 cells, or a power of 24 volts. In all of the cases recorded, the foetus was effectually destroyed, the tumor diminished in size, and the patient made a good recovery.

IRON AS A PROPHYLACTIC.—In the *St. Louis Courier of Medicine* for February, 1883, Dr. W. D. Green, of Mt. Vernon, Ill., gives his experience with tincture of iron as a prophylactic in scarlet fever, measles, etc. His observations extend over a period of five or six years, and his conclusions are, that when iron is used as a prophylactic the disease either will not appear at all, or if it

does it will be very slight as compared with patients similarly exposed, who have not used the remedy. He has great faith in the efficacy of iron in preventing or modifying the attacks of infectious diseases upon those who have been exposed to them.

BRITISH DIPOMAS.—Dr. James A. Grant, son of Dr. Grant, of Ottawa, has successfully passed the necessary examination, and was admitted a Licentiate of the Royal College of Physicians, London. R. Logan, M.D., (McGill College) of Iona, Mich., and W. A. D. Montgomery, M.D., Toronto, have successfully passed the required examination for the diploma, and were admitted members of the Royal College of Surgeons, England; and Drs. P. J. Strathy and G. S. Beck of Trinity Medical College, and J. M. Cotton of Toronto, have successfully passed the primary examination.

MENINGITES IN CHILDREN.—Dr. Vovard (*Four. de Médecine Bordeaux*, Nov. 1882) claims good results both in tubercular and non-tubercular meningitis of children from potassium iodide internally and the application of olcum tigllii to the scalp. The head is shaved, croton oil applied, and after the pustules have appeared they are smeared with an irritating cerate. Hebra and others have had similar results from the appliction of antimony ointment.

THE DUFFERIN MEDAL.—It will be remembered by our readers that Dr. W. T. Harris, of Brantford, Surgeon of the Dufferin Rifles, won the above-named medal. The Dr. has since received the following letter from Lord Dufferin:

Constantinople, Oct. 10th, '82.

My Dear Dr. Harris.—I am much obliged to you for sending me the *Canada LANCET* and *Expositor*, announcing that you had won the Dufferin Medal. I congratulate you on your success, and am,

Yours sincerely,

DUFFERIN.

A NOVEL USE OF PEPSIN.—Dr. Hollmann (*Nederland Weekblatt*), *Med. Record*, has used an aqueous solution of sixteen grains of pepsin as an injection into the bladder of a patient who had hæmaturia, and in whom a catheter failed to empty the bladder. A few hours later a dark, viscid, fetid fluid readily escaped through the catheter.

PROFESSIONAL EXAMINATIONS.—We beg to call attention to the announcement of the Professional Examinations of the College of Physicians and Surgeons of Ontario, to be found among our advertising pages. The examinations commence in this city and in Kingston, simultaneously, on the 3rd of April, at 9 o'clock a.m.

NEPHRECTOMY.—Two cases of nephrectomy are recorded in the *New York Med. Journal*, Feb. 17, 1883; one by Dr. W. M. Polk, for the removal of a floating kidney, and the other by Dr. J. W. Wright, for chronic pyelitis. In the former case the patient died; in the latter recovery took place after a protracted illness.

LARGE VESICAL CALCULUS.—Dr. Howe of the Bellevue Hospital Medical College recently removed by the supra-pubic operation after failure by the median, a calculus weighing over eight ounces, from a lad 16 years of age. The stone measured 3 inches in its lowest diameter, and $2\frac{1}{4}$ inches in its transverse.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.—The committee having in hand the arrangements for establishing an Association Journal, has decided to set it on foot at once. It is to be a weekly, published in Chicago, and Dr. N. S. Davis has been appointed editor.

PHYSICIAN-IN-ORDINARY TO THE QUEEN.—Dr. Wilson Fox has been appointed Physician-in-Ordinary to the Queen, *vice* Sir Thos. Wilson, deceased; and Dr. Owen Rees has been appointed Physician-Extraordinary in succession to Dr. Fox.

INTERNATIONAL MEDICAL CONGRESS.—The eighth session of the International Medical Congress will be held in Copenhagen, commencing on the 10th of August, 1884.

APPOINTMENTS.—Dr. A. Worthington, has been appointed a License Commission under the License Act of 1876, for the County of Huron, (W.R.)

CORONER.—Dr. D. C. Leitch, of Duart, Ont. has been appointed coroner for the County of Kent.

Prof. Von Bischoff, of Munich, died on the 3rd of Dec. 1882, at the age of 75 years.

Books and Pamphlets.

RHEUMATISM, GOUT, AND SOME ALLIED DISEASES ;
By Morris Longstreth, M. D., Philadelphia ;
New York : Wm. Wood & Co.

This was the October issue of Wood's Library of Standard Medical Authors. We regretted our inability to acknowledge its reception promptly, and now that we have read it we dare hardly say that we do not regret the time expended over the perusal; not indeed that a portion of the contents is not both instructive and interesting, but that the author might, with economy, to himself, of both time and labor, and to his readers of much patience, have put into much smaller bulk all that is original or practically useful. We presume, from his name, that he is a person of foreign nationality, —probably German,—therefore to write otherwise than expansively must be an inherited impossibility. If we are right in our supposition, it must be a matter of international politeness that we abstain from criticism of the numerous violations of English grammar with which even a third-book common school boy would not fail to see that it abounds. As, however, on this continent, we seem to be pretty speedily approaching an era in which grammar will be regarded as a mere literary embarrassment, we are inclined to regard this author as a meritorious contributor to the desirable consummation of release from all such scriptorial impediments; and had Dr. L. constructed his sentences with rather less parenthetical jumblement and foreign involvement, we should have been better pleased with him. Perhaps, however, in treating of a disease so imperfectly understood as he believes rheumatism hitherto to have been, it was well that he should impart his knowledge in such a style as might give best promise of irritating and worrying his non-asthmatic readers. But let this calamity, and all similar misfortunes pass; for if those who are willing to part lovingly with Dr. L., will defer the reading of his first fifteen chapters, and precedently take up the last four, on the *Treatment* of Rheumatism and Gout, we venture to hope that they will fall back on the former with a much better relish, and will even feel resolved to avoid quarreling with him over his redundancy of padding. Indeed, the very surplusage of his display of medical erudition

must, to practitioners of advanced years, or to younger men of feeble memories, prove refreshingly instructive; for they will find in his discussion of the varieties, causes, Pathology, complications, morbid anatomy, diagnosis, etc., a very useful summary of their student days exertations: though, after disposing of all this, they may feel inclined to complain that the critical author has left them rather perplexed as to his own decided views. Truly "much study is a weariness of the flesh," and of many books the end is often the best.

LEGAL MEDICINE; By Charles M. Tidy, M. B., F. C. S., London. New York: Wm. Wood & Co.

The above work makes the November and December issues of W. Wood & Co., and it certainly does great honor to that enterprising establishment. The author has treated his various difficult subjects in a masterly manner. The style is clear and appropriate, and the structure gives evidence of cultivated scholarship and a competent knowledge of the various branches of medical science with which it was incumbent on him to be well acquainted. We presume the legal points coming under recognition have been treated of with no less accuracy and care. The first volume treats of the following very important subjects, with which every medical practitioner should be adequately acquainted.

Chap. 1st—*The process of law*; embracing Coroner's Inquest: Duties of Coroner's Jury, Post-mortem, Magistrate's enquiry, the Grand Jury, the petty Jury. 2nd—*Evidence*; embracing many sorts. Excellent advice to medical witnesses will here be found. This whole chapter is truly valuable. Chap. 2nd is an exhaustive discussion of the *Signs of Death*, and the appearances produced by it. Chap. 3rd treats of personal identity, under four important heads, comprising fifteen sections, all of which merit careful study. Chap. 4th—*The Causes of Death*. This chapter is one of capital importance. No medical expert should be unacquainted with the valuable instruction conveyed in it. Chap. 5th—*The Post-mortem*. It is our decided conviction that too many medical men are but imperfectly informed on the legal requirements of this important process, and it is easy to understand that very serious evils may result from defects in the mode of carrying it out, and the limited extent to which it is often pushed. Chap. 6th—*On Monstrosities and Hermaphrodites*. This chapter will be more interesting to the curious, than practically instructive to the medical expert.

VOLUME II.—The author here treats of a different order of cases, some of which,—as Expectation of Life, Presumption of Death, and Survivorship, are more interesting to the actuary and the legist than to the physician, though the latter may derive not a little amusing edification from contemplating some of the ridiculous, if not purely nonsensical, tenets of law, and the zigzag rulings of judges. In truth the whole code of Survivorship seems to be a scandalous caricature of natural justice, and an insult to humanity and sound reason.

The remaining subjects of this volume are *Heat and Cold*; *Burns and Scalds*; *Lightning*; *Explosives and Combustibles*; and *Starvation*, all of which are ably handled, and will be read with profit.

The whole work is enriched with an immense array of cases, drawn from the records of Courts, the reports of medical journals and other reliable sources. Among the cases quoted from medical journals it is rather gratifying to us to find one, on page 223, vol. 2, taken from the *Canada Lancet*;—"a case of enforced fasting," resulting from œsophageal stricture produced by swallowing a weak lye. The patient's weight, in ten months, decreased from 120 lbs to 60 lbs., and at death he weighed only 40 lbs. During the last seven months of life enemata of milk and eggs were all that could be given. (Vide *C. Lancet*, of Nov., 1880).

The illustrative cases adduced by Dr. Tidy in this most valuable work, will be found a truly instructive repertory of medico-legal instruction. If all the publications of Messrs. Wood were of equal merit with this one, we should regard them as bountiful benefactors to the medical profession; but infallibility in selection would be a requirement beyond the command of the most sagacious of modern publishers. It has been our rule to award praise where it is merited, and not to withhold censure where it is called for. Every other sort of criticism is but a fraud perpetrated on the subscribers to medical journals.

Births, Marriages and Deaths.

By the Rev. J. Scanlon, assisted by the Rev. R. V. McKibbin, David Wallace, M.D., of Medcalf, to Esther Angelina Eastman, of North Gower, Ont.

At West Malvern, Eng., on the 19th of January, Joseph Clarke, M.D., of Oshawa.

At Sherbrook, N. S., on the 3rd ult., James McG. Campbell, M.D., aged 40 years.

On the 16th ult. Joshua Chamberlin, M.D. of Frelighsburg, Que., aged 84 years.

At Parkhill on the 22nd ult. J. S. Balmar, M.D. aged 33 years.

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Original Communications.

ON COUNTER-IRRITANTS, BLISTERS, ETC.

BY ALFRED J. HORSEY, M.D., M.R.C.S., ENG.,
OTTAWA.*

GENTLEMEN,—With your permission I will submit to you a few thoughts and observations, on some local medicaments, as irritants and blisters, which have in a greater or less degree engaged the attention of each of us. The remarks that I am about to make, may to some appear heterodox, though, if they are a departure in the direction of truth you will commend them, but if not, the reverse must be your verdict. I may not tell you anything new; but, by drawing your attention to the subject, set you thinking. I hope at least just now to set you talking, so that your various experiences and opinions may be known, and the outcome be of benefit both to ourselves and patients.

It is not because I think topical applications of the class I have mentioned, to be of no service in the treatment of disease that I have chosen them for the subject of my brief and imperfect remarks, for I believe them to be the greatest comforters, as well as the greatest tormenters of humanity, but curative of disease only in a minor degree. I believe them to be as we read of them in our text books even of to-day, a most barbarous and cruel mode of treatment, sometimes attended by positive harm, often as, alas, is too frequently the case in much we do in medicine, applied in a haphazard or routine sort of way, it may be for the sake of appearing to do something, hoping at least no harm may come of them. Not that routine practice, where we are convinced that it is productive of

good, should be objected to, for much of our most useful treatment is empirical; we may not know how it proves beneficial, but for this reason will not discard it, but continue to carefully use it, hoping some day to have revealed that which is now hidden from us.

Counter-irritation, as you know, is irritation excited in a part of the body with the view of relieving a pathological irritation already existing in another part. It is one of the oldest applications of our art, being handed down to us from I don't know whom, very probably it was the first domestic remedy, a moral rubefacient, applied by the hand of mother eve, to the *glutei maximi* of master Cain, and judging from the little villian's after-career was productive of much good.

Derivation or revulsion means a centre of irritation, established in a part for the purpose of abstracting the blood and vital manifestations from some other part. Trousseau says, it would greatly embarrass us to have to say by what internal paths revulsions act; the explanations of pathology have not made the question clear, and we freely confess we have vainly sought the explanation. This mode of treatment is an attempt to imitate nature, suggested by the knowledge, that disease for reasons unknown, suddenly disappears from one part or organ of the body to appear as suddenly in another which phenomenon is known as metastasis. I think it is admitted there is such a thing though very often, that which is thought metastatic is secondary to the original disease and merely an extension of it, as is exemplified in the deposit of pus in the joints from a distant wound. The most perfect metastasis is said to take place between the parotid glands and testicles, which are likewise, said to be in symyathy one with another most intimately. Though this connection is not very apparent, it is true in a limited degree in all probability, that one disease proves curative of another, as after prolonged fevers old ulcers heal and skin diseases disappear. Glands in many morbid conditions seem to play a principal part, the brunt of the disease falling heavily upon them. For instance, many disorders manifest themselves by derangement of the glands we can see and feel about the throat, the tonsils, parotids, thyroids and others, and yet we know the *materies morbi* to be not only in these parts but generally through the system.

* Read before the Bathurst and Rideau Medical Association, Jan'y. 17th, 1883.

Long ago, even before the time of Brown and Broussais, it was thought that by setting up a greater extent of irritation, that a less was drained of its blood and vital phenomena and thus the part was enabled to regain its normal action. I think I am correct in stating that it is not generally thought so now, but rather that an inflamed part has the power to draw to it all the blood required to carry on the morbid changes in it, and that though a second part be inflamed it does not detract from the first. There are various other terms now almost obsolete, which signify the methods in which irritants act, or were supposed to act; such as transpositive, substitutive, spoliative, but we will not dwell on them here.

Local applications may extend their influence in more ways than one; but it is chiefly through the nervous system, the impressions being transmitted by the different nerves to their centres and thence reflected to distant parts.

Ringer says, by applying an irritation to the termination of a nerve, we excite pain and the consequent phenomena follow in their order; the irritant produces certain molecular changes, which thence extend to the sensorium, and on removing the cause of pain the molecular arrangement reverts to its original condition and the pain subsides. In every instance of pain, however produced, molecular changes must involve the nuclei of nerves or the centripetal fibres passing from them to the sensorium. Some think that pain is an exaggerated common sensation. There is no doubt that topical irritations make themselves felt in parts distant from the points of application, whether they are from the centre towards the surface or the surface towards the centre. In epilepsy we have convulsions; snuff excites sneezing; ipecac, vomiting, each sensation excites a different molecular arrangement in the nucleus of a nerve.

Let us ask ourselves are irritants curative in disease? Are they capable of doing what their long names would lead one to believe they can do? Through the sympathetic system or trophic nerves, as they are called, because they preside over nutrition and secretion, various impressions are transmitted, capable of modifying the processes in various ways and to some degree. But we cannot make them do anything we wish, even if we knew what to wish for. They are capable of performing certain functions in health, it may be presiding over a gland

that makes saliva and we cannot compel them to secrete anything else. By interfering with them, by irritants and other disturbers of the laws upon which they work, we may for a time and to some degree make them secrete a greater or less quantity, or a more or less abnormal quality; but we can never make a salivary gland secrete else than a good or bad quality of saliva. And yet we, to a part already thrown off its balance by a morbid process, seek to make it right by another foreign imitation of our own which we call art, hoping by this homoeopathic treatment, out of two wrongs to make a right. And so it is with nutrition, we cannot go beyond a narrow limit in it. We can deprive the system of this or that element, or give a superabundance of this or that, but only tissues more or less normal can be produced. We may pervert, clog or even suspend action by irritants and poisons, but we can do no more.

There is no doubt, for it is daily exemplified, that counter-irritants are not only our most common but most effectual and safe means of relieving pain, whether applied in the form of mustard as a rubefacient to some painful nerve, or that of the potential cautery in painful disease of joints. And here we might ask ourselves, what is pain? Austie has poetically called it "the prayer of the nerves." It is said to depend on a molecular (electrical if you like) change in a nerve different from that of health, but of the same nature. When I said blisters were the greatest comforters of mankind I meant by their pain-relieving properties. It is thought they do so by altering the molecular arrangement in the nerve, or its nucleus or replacing it by a different one. Might it not be, in the case of the more powerful counter-irritants and cauteries, by shocking or paralyzing the nerves so rendering them unfit to carry impressions? However it is brought about, their pain-relieving properties are beyond a doubt. As to their curative powers, except indirectly in this pain-relieving quality, to my mind, they are but weak and unreliable agents.

A blister applied directly to an ulcer, in which there is deficient action or indolence, may so change it that it may readily heal—perhaps by drawing more nutriment to it, or by destroying granulations in a sore with abnormal action, as is shown by large, soft, pale, insensitive cells, and thus help it to repair. Or it may be by killing some

local parasites as the trichophyton tonsurans in tinea tonsurans or ring-worm, and in other local affections in divers ways, prove curative. But in general diseases to me they have long seemed unproductive of good, excepting by relieving pain.

In pneumonia for example, in which blistering has been used perhaps more than in any acute disease, I have failed to see any good which could be attributed to its use, but certainly much pain and discomfort if not positive harm. Dr. Inman, and others, have shown that blisters and counter-irritants applied to the chest or abdomen will, in some instances, excite inflammation of corresponding parts of the pleura and peritoneum. Again, an irritant applied to a joint distended by synovial fluid increases for a day or two the amount of fluid. The arrest of lung fever, which I regard pneumonia to be, by the application of a blister measured by feet, seems to me as irrational as to place one over the back for the cure of small-pox. If there is any disease in which a whole and healthy skin is required it is this one. The skin has been called the external lung and to damage a large extent of it as is sometimes done cannot be other than injurious. It is through it that a critical termination is sometimes brought about by profuse sweating. I once heard Bennet, by whose teaching bleeding was abandoned in this disease, and who was not much in favour of blistering say:—Inflammation of the lungs frequently terminated in one of three ways, a copious sweat, urination or expectoration.

It was once the fashion to treat pneumonia at the outset by a large fly blister hoping by revulsion to arrest the disease, but as time went on its application became more and more retarded, till, as Dr. Wood says, "it is precisely at the period when depletion, local and general, is no longer required that blisters are applicable—or, as it might be put, just as the patient has turned towards a favourable termination he is subjected to useless pain and annoyance and his recovery probably retarded by the abstraction of more or less serum which contains almost as much albumen as blood and also some fibrin. In pleurisy their benefit in my experience is very doubtful, and I think it amongst the rarest probabilities, that the amount of serum in a pleural sac can be diminished by their use.

In inflammation of the bowels it is the common practice of the day to place upon the abdomen

some active counter-irritant hoping it will in some way prove remedial. Reasoning from analogy the practice is very questionable. In burns and scalds, especially of the trunk, inflammation of the viscera is one of the most common sequences, and more especially is this the case with the bowels.

Wm. Curling, of London Hospital, was the first to call attention to the frequency of ulceration and perforation of the duodenum in scalds and burns,—not those of degree but of extent. It is superficial sores of large extent that most commonly produce them, just such an injury to all appearance as a fly blister would cause.

The foregoing remarks do not apply to the more emollient applications, liniments, rubefacients and poultices, which, by their heat, moisture and active principles are capable, with few exceptions, of doing what the more powerful vesicants are capable of without their damaging effects. And now, gentlemen, let me thank you for listening to my paper, which I shall rather abruptly close for fear what was intended for a mild rubefacient should prove a blister.

LONGEVITY IN BRAZIL.

BY JOSEPH WORKMAN, M.D., TORONTO.

If the occurrence of remarkable instances of longevity can be regarded as a sufficient indication of the salubrity of the climates in which they are observed, we may feel almost warranted in the conclusion, that our preconceptions as to the unhealthiness of some countries, heretofore generally reputed to be very inimical to human vitality, have been very erroneous. In the November (1882) number of the *Uniao Medica*, of Rio de Janeiro, a list is given of persons who had attained to very advanced ages, in the Empire of Brazil. The following is a translation from the Portuguese, of the details presented:—

"In the province of Rio Grande, south, there is a locality called Povo Novo, (young people), which should rather be styled Povo Velho, (old people), because of the long life of its fortunate inhabitants. We here present a practical demonstration of the existence of the elixir of life in this precious land: Counting 17 years of life in the last century, there is in this place a woman named Damazia de Barros, who married at 16, and lived in wedlock 70

years, and has been a widow for 15 years. From her marriage she had 11 children, of whom eight are now living; she has 48 grandchildren, 142 great grandchildren, and 20 great great grandchildren; thus showing a descent of 218 persons, who are all now in the full enjoyment of their mental faculties. She has a son who is past 80, residing in Arroio Grande, from which he comes every year to visit his old mother, making the journey, without much fatigue, in a single day; two sisters, each over seventy, accompanying him.

In the same locality, there are, of less ages, the following persons:—Donna Maria Pereira das Neves, aged 95, and Donna Muela das Neves, aged 93, who are both industrious, and occupy themselves in domestic work. Raphael dos Santos, aged 94, who is able to do some work; Donna Marenciana da Rosa, aged 90. There are in Povo Novo an unusual number of persons, in comparison with the entire population, from 70 to 80 years old. It is there no rarity to hear of persons of 100 years or over. From 1840 to the present date the following persons have died at this advanced period: Anna Veladoa, 114 years; Maria de Barros, 113; Joao da Rosa, 113; Diego de Barros, 104; Luiza de Barros, 106; Anna da Rosa, 107; Domingos de tal, 106; Rosa Rogado, 104; Maria Joaquina da Conceico, 102; Manuel dos Quadros, 101; Caetano Silveira and his wife died on the same day, and were reckoned to have each passed 100 years of age. Donna Damazia de Barros, in spite of her 100 years, is able to work with the hoe from morning till night. Albino de Barros, her son, is 87; he resides near Arroio de Palma, 12 leagues from his mother, whom he visits every year, on horseback. The youngest son of this woman, Manuel de Barros, is 56. Mathias de Barros, the husband of Damazia, died 16 years ago. A few days before his death he shouldered a heavy burden, and trotted off with it like a strong boy. He related that he had danced at the ball given on the occasion of his wife's baptism. In this family many of the members are above 60 years old. Maria de Souza is 108; D. Monoela da Rosa is about 100; D. Maria Soares, the mother of Lieut.-Colonel J. Soares, is 95; Eugenia Nunes de Sousa, is 83; Justino Luiz de Lima is 88, and his wife is 90; Antonio Ilheo, is above 100; Polydoro Pereira died at over 100; D. Joanna Mendes died at over 100; a short time before her death she

still, rode on horseback, and went out at all hours, in the exercise of her function as a midwife. Her son, Frederico M., reached the age of over 100.

Still more of the Macrobiotic sort.—Within the present year (1882), there died in the vicinity of S. Francisco de Paula, a Brazilian named Antonio José da Silveira, aged 132 years, and an African named Goncalo, aged 100, both enjoying to the end their complete faculties. There lives in the city of Porto Alegre, Rio Grande, South, in the street Riachuelo, No. 160, a lady who was born in 1773. She married at 25, the Governor D. Diego de Souza being a witness. in the year 1798; she is therefore now 109. She has the perfect use of her faculties; converses with much decision; travels on foot through the whole city, visiting many of her friends; on the day of visiting the graves, she goes to the cemetery, and returns from it on foot, and in like manner she attends the festivals of the *Menino Deus*. She numbers sons, grandsons and great grandsons. *Ditosa senhora!*

Some of our modern Thomases may be disposed to question the accuracy of the preceding figures, simply because they do not comport with their own experience, which is a form of argument no less cogent than that of the African who denied the possibility of water becoming solid, because he had never seen frost. It is, no doubt, quite true that old people have but weak memories, and from having no reliable record of their births, or having forgotten the dates, they may fall into the error of exaggeration, and by frequent repetition become at last sincere believers in their own assertions. Some, however, of the preceding Brazilian records appear to have fair pretensions to accuracy.

HINTS ON CHRONIC CONSTIPATION.

BY T. ARNOLD HAULTAIN, M. A., PETERBORO, ONT.

Perhaps no malady of those that are popularly classed as trivial and undeserving of medical aid, is so pregnant with results destructive of the very activities most required by the class of persons oftenest afflicted with it, as Chronic Constipation. It is the sedentary man, the man who lives by his brain, that suffers most; and it is his brain, his mental faculties, that he finds chiefly impaired. Every student knows the value of a laxative dur-

ing examinations; Carneades, the most celebrated of the later Academic philosophers, I believe it was, who was accustomed to take a strong purgative before arguing against the Stoics; and I once heard of a commandant of a regiment who vowed he knew no better incentive to the invention of a new manœuvre than an anti-bilious pill.

The particular species of constipation to which I refer, is that due to the impairment of the contractile power of the muscular coat of the large intestine. So many influences tend to diminish the patient's efforts to cure this habitual form, that, in nine cases out of ten, only by spasmodic and soon-discouraged endeavors can he be persuaded to undertake remedial measures. Its persistency; the expense and trouble of procuring drugs, the use of which cannot be long continued; the perceptibly waning efficacy of many of these very drugs; the want of time to persevere daily in such mechanical contrivances as enemata, suppositories, lengthened attempts at evacuation; the absolute impossibility to the majority of sufferers—in this country at least—of procuring throughout the year such articles of diet as are almost a *sine qua non*; the inability to devote to defecation the time best suited to the system,—these are some of the causes that lead to a cessation of the employment of measures, such as, even to procure a moderate amount of success, demand untiring pertinacity. This being the case, the simpler the remedies, and the more suited to the habits and circumstances of the patient the better. I do not hesitate therefore, to suggest the following remedial—I will not as yet say curative—plan as an adjunct or auxiliary to the conventional treatment.

This is the induction of a greater number of evacuations *per diem* than that to which the patient has been accustomed. The intestinal canal has been subjected to abnormal and long-continued distension; nutrition of this organ has been diminished; its muscular fibres are probably somewhat atrophied, and the nerve *plexûses* do not fulfil their function. If then we can eliminate the causes of distension we shall have accomplished everything; and the less unnaturally the elimination is effected the better.

This augmentation of the number of evacuations may, I think, best be provoked by:—

1. Regular attempts at defecation, not only after breakfast as usual, but also after the mid-day and

evening meals; and if this last consists of 'tea,' after supper also.

2. Employment of the measures adopted or prescribed in the medicinal and mechanical treatment at times calculated so that these will exert their effects after the mid-day and evening meals, leaving the first to nature.

3. (a). The ingestion of a glass of cold water, or—better still, cold tea or coffee, before luncheon, and (b). Supplementing the last repast—which ought to be light—with a small quantity of spirits diluted with hot water. This, so common a custom amongst the lower and middle classes in England, exerts a great influence on the peristaltic action of the intestines, and is preferable—at all events to the palate!—to any stomachic.

4. Kneading the abdomen with the fingers, especially along the course of the descending colon, sigmoid flexure and rectum, while at stool, in the intervals of the expulsion of feculent matter. By these means I believe (and, I may add, not on theoretical grounds alone) the bowel may soon be made to understand that it is expected to divide its daily task of expulsion into three or more portions.

The theory on which the success of the method depends is, of course, that the colon, rectum, etc., do not become distended to the extent that they otherwise would be and are, were there only the usual single evacuation in the twenty-four hours. And it seems plausible to imagine that, the quantity of food ingested remaining the same, the amount of nourishment extracted and assimilated remaining the same, then, if the *excreta* are expelled instead of being allowed to be retained for twenty-four hours there cannot obtain that same enervating distention of the bowel.

RETENTION OF A DEAD FŒTUS FOR NINE YEARS.

BY A. D. M'GILLVARY, SYDNEY, N. S.*

It is an old saying that "truth is stranger than fiction." I submit to you the following history, extracted from my note-book, not for any very great advantage it may be to my professional brethren so much as to show how much the human system can endure at times.

* Read before the Cape Medical Society, Feb. 13th, 1883.

On the 1st of November last I was called quite a distance into the country to see a patient who gave me the following account. Her name was Mrs. J. McL., aged 36 years, has been married eleven years, her husband still living. During the first year and nine months after being married the menstrual flow was regular and normal; at that period her courses stopped, and for the next six months she had all the symptoms of pregnancy with quickening in the fourth month. About the end of the sixth month she received a severe injury in the back while driving in a waggon over a broken bridge. Immediately after the injury she was attacked with vomiting, and from that time her health began to fail. In a fortnight's time her feet and legs began to swell and the abdomen became flaccid and uncomfortable. A month after the injury she had severe intermittent pains for twenty-four hours, followed by a discharge of water and a little blood. About a month from this date she awoke in the night, flooding. A doctor (save the mark) was called, who gave some medicine and left. This flooding continued for six days, when it stopped, and a white purulent discharge began, which has continued ever since. A year after the purulent discharge began she consulted a second doctor, who gave some more medicine, and ordered vaginal injections. At the end of two years from the time the discharge of pus began, or about three years from the date of pregnancy, small pieces of bone began to come away—these continuing to pass at irregular intervals for over six years. Eighteen months ago she consulted a third doctor, who ordered injections again. At the time of my visit her condition was as follows: Pulse, 130; temperature, $103\frac{3}{4}$ —very much emaciated—and very nervous; has had hectic fever and profuse night sweats for over a year. Has had diarrhoea and vomiting for the last three months; is unable to take any solid food. The abdomen is enlarged to about the size at seven month's pregnancy. The uterus feels soft and boggy, marked tenderness on the upper portion, particularly on the right side. On making a vaginal examination I found the uterus low down, the os slightly dilated, the cervix very much hypertrophied, and the cervical canal impacted with pieces of bone, some of them deeply imbedded in the tissue. With a pair of forceps I removed some eight or ten pieces, but one larger than the

rest and high up I could not remove. I then, with difficulty, passed a gum catheter into the uterine cavity and removed three pints of most foetid pus; afterwards I washed out the cavity with a solution of permanganate of potash. I put her upon sulphate of quinine, and as the perspirations were so very profuse I gave her a solution of sulphate of atropia.

On November 3rd, accompanied by Dr. Wm. McKay, of Reserve Mines, we visited the patient. Found the pulse 120, temperature 102° ; the general condition much the same as on previous visit. From the foetor of the discharge the air in the room was almost unbearable. I had the patient placed on a table, then passed a catheter into the uterine cavity and removed nearly a pint of thick pus, not quite so offensive as the first.

Dr. McKay then put the patient under ether, and I removed the impacted bone from the canal, that I could not remove on my first visit. My sound passed into the cavity about six inches. I found no solid body, but a mass of semi-solid material that grated on the sound as it passed through it. I immediately began to dilate the neck, using the blades of a pair of forceps as a dilator. In a short time I was able to pass a pair of placenta forceps and with them removed a quantity of broken down tissue mixed with bone. Having emptied the uterus I washed out the cavity with the permanganate solution as before. The patient came out from under the ether very slowly, she being an hour and a half under its influence. During the whole operation there was not two ounces of blood lost. The patient being placed in bed, I left the following instructions: Hot turpentine stupes to be applied occasionally to the abdomen; opium to be given if there should be much pain or tenderness, and sulph. quinine to be continued and largely increased should the temperature rise high.

November 6—Visited patient again; pulse 96, temperature 101° , general condition much improved; night sweats still troublesome, but not so bad as formerly. The abdomen was markedly reduced in size, with very little tenderness on pressure. The discharge is still copious but not so foetid. I introduced a No. 12 catheter and drew off about four ounces of very thick pus, after which I washed out the cavity as on the other occasions. I gave sulph. quinine and tinct. ferri mur., and

instead of the atropia solution I gave tinct. of ergot. This was my last visit.

Here let me draw attention to some of the difficulties I had to contend with : First, the distance from town prevented my giving the case the attention it required, and the debilitated condition of the patient prevented her removal ; it also prevented me from using the ordinary means of dilating the os uteri, and necessitated my using forcible dilatation. Had I failed in this attempt I should have had to divide the neck on either side sufficiently to pass my forceps ; yet, in the face of all these difficulties, my patient is making a good recovery. There is still some discharge ; the night sweats are troublesome at times, yet she is steadily improving, taking sulph. quinine and tinct. ferri mur. before eating, and iodide pot. with fl. ext. sarsap. co. between meals.

The lessons to be learned from this case are : 1st. The great necessity for a correct diagnosis ; 2nd. Encouragement to try, even in almost hopeless cases ; and 3rd. When instrumental interference is required, use the appliances you have at hand, even if they are not just those laid down as the proper ones. If the work is properly done success may crown the effort when everything appears to be against you.

ON THE TREATMENT OF HYDROPHOBIA.

BY J. M'CREA, M.D., CAMPBELLFORD, ONT.*

In June, 1860, I attended a case of hydrophobia near the Village of Hastings. The case terminated fatally on the fifth day after the symptoms were well marked. At the time and since, I have read much on the subject, and have studied carefully the opinions of different writers.

Dr. Watson appears to have devoted much time and talent in discussing the nature and treatment of this terrible disease ; and after giving a long list of medicines and operations together with many so-called specifics, that in time proved to be of little value, he sums up by saying that the disease once established was incurable by any known remedies, and that our efforts should be directed to the removal of the virus at the seat of injury at an

early date, and that the only safe and effectual remedy was perfect excision of the part bitten. But it is quite possible that the part bitten may be so situated that excision may be difficult or dangerous. Now, Dr. Watson, foreseeing the trouble attending such a complication, has recommended that if a general excision should be difficult or dangerous to make skewers of wood and insert a skewer into each separate tooth-mark, and then make a circular incision around the skewer, and thus remove the poison. Or, if that operation was dangerous or difficult, to wash out the wound and apply nitrate of silver.

About 20 years ago I treated two cases of bites from decidedly mad dogs. In March, 1861, I. B., aged seven years, went to the barn to call her father to dinner. As she was returning to the house a dog came from under the barn and seized the child by the leg. She was wearing short dresses at the time, and the bite was on the bare leg, making a very severe wound in the popliteal space. The cries of the child brought her father to her, and with a fork he was using at the time, he killed the dog. I was called to the case, and finding several of Mr. B.'s animals bleeding from recent wounds, inflicted as we supposed by the dog, we were disposed to think seriously of the matter. In examining the wound I found the formation of the part such that I could not see my way very clear to excision either general or on the skewer plan, and I resolved to treat her by the application of caustics. I had with me both nitrate of silver and chloride of zinc, and resolved to use the zinc. After probing the wounds to ascertain their depth and direction, I washed them freely, using a male syringe, with very warm water, and continued the operation for a considerable time. I then shaved the rods of zinc into very fine points and introduced one into each separate tooth-mark, being more particular that the points were sufficiently long to reach the bottom than to their circumference. I ordered warm linseed poultices to be frequently applied, and left opium powders to allay pain and procure sleep. On the second day a profuse suppuration ensued, but not before I began to regret having placed so formidable a caustic in the immediate neighborhood of the knee-joint. The inflammation and suppuration soon ceased, the wound healed kindly, and she made a good recovery from the effects of the caustic. She has

* Read at the meeting of the Newcastle and Trent and Quinté and Catarqui Medical Association.

never shown any tendency to hydrophobia, is married and has five children, yet Mr. B. was obliged to shoot five or six of his animals, unmistakably mad in periods ranging from 13 to 27 days.

My second case was in the month of January, 1864. T. C., a well-to-do farmer, came to consult me, having just a few hours before been bitten by his own dog. He reported that he found his dog acting strangely, worrying the animals in the barn-yard, and in the attempt to pull the dog off a sheep, the dog seized him by his hand, passing his teeth entirely through the hand between the base of the index finger and the thumb. He killed the dog, and after seeing that quite a number of his animals had been bitten, he became alarmed, fearing the dog was mad.

I gave him a full history of I. B.'s case, and advised him to submit to the same line of treatment, telling him I had every confidence that the suppuration induced by the caustic would perfectly eliminate the poison, admonishing him also of the great pain and inflammation that was sure to ensue. He appeared to dread the caustic, and begged of me to excise the part, or amputate at the wrist. I at length prevailed on him to allow me to use the caustic, which produced the usual results, causing great pain and swelling of the hand, relieved in a few days by a profuse suppuration. His hand healed satisfactorily. Mr. C has never felt any tendency to the disease, now nearly 19 years, but was obliged to kill seven of his animals in periods ranging from 15 to 74 days.

As nothing reliable has been devised with the exception of excision, and that operation being sometimes difficult, or even dangerous, and notably so in the cases I have seen, I humbly submit that if I were bitten by a rabid animal I should request to be treated by caustics, and that caustic the chloride of zinc, and would feel the utmost confidence in being free from danger from the bite.

The cases I have reported upon would probably have been cases of which Dr. Watson says: "That if he were bitten by a decidedly rabid animal upon his arm or his leg, and the bite was of such a kind that the whole wound could not be excised, my reason would teach me to desire, and I hope I should have fortitude enough to endure, amputation of the limb above the place of injury."

REPORT OF A CASE OF POLYSARCOMA.

BY J. ALGERNON TEMPLE, M. D., M. R. C. S. ENG., ETC.

Prof. of Midwifery and Diseases of Women and Children in Trinity Medical College, Toronto, etc.

Owing to the rarity of this disease I am induced to give the following brief report of a case occurring in my practice:—

On July 1st, 1881, I was requested to see a gentleman, aged 77 years, from whom I got the following history:—Two months previous to this time he was attacked with excessive pain along the course of the left sciatic nerve, which has continued up to the present in spite of medical treatment. He was advised to have some Turkish baths, and had three, which appear to have prostrated him very much. About two weeks before I saw him he noticed a great number of small, hard, painless lumps, scattered over the whole anterior surface of the abdominal wall, accompanied by great weakness but no pain. The day I saw him, his pulse was 112, temperature 99.2; skin hot and dry; countenance anxious and haggard, tongue coated, bowels constipated, entire loss of appetite, restless, wakeful, despondent, considerable emaciation, accompanied by great weakness, and inability to walk without assistance. The whole abdominal surface was studded over with a great number of small hard subcutaneous tumors, varying in size from a buckshot to an almond, movable, colorless, and painless. Some of them were attached to the skin on their summit. A considerable number were also present in the groins, and both axillæ. I searched over the whole of the remaining part of the body and found but one on the left forearm. I concluded I had a case of Polysarcoma to deal with and gave an unfavorable prognosis. The symptoms of emaciation and weakness continued to increase, and he became comatose and died on the 5th September. The treatment pursued was chiefly of a tonic character with good diet. I also gave him chian turpentine. Diarrhœa and vomiting came on a few days before death. The tumors were never painful but he constantly complained of soreness and heat within the abdomen. After death I removed several of these small tumors and sent some to Dr. Osler, of Montreal, and Dr. Sheard, of Toronto, for microscopical examination.

Dr. Osler writes me as follows :—" I have examined the specimens, which appear to be of the nature of a round-celled sarcoma *i. e.*, a tumor composed almost entirely of round cells about the size of colorless blood corpuscles, with very little stroma, only sufficient for the support of the vessels. In places there were a few giant cells but they did not form a special feature in the growth " Dr. Sheard's report was substantially the same, viz : that these growths were malignant and that the case was one of polysarcoma.

The family history of deceased was unexceptionally good, there being no evidence of cancer or allied disease. His previous health had always been very good. I regret I was prevented by the family from making a post mortem examination.

The Committee of the American Medical Association, appointed to arrange for the publication of an Association journal, have recommended the undertaking.

Reports of Societies.

BRANT CO. MEDICAL ASSOCIATION.

The above society held its regular quarterly meeting in Brantford on March 6th the President, Dr. Clarke, in the chair. An unusually large attendance of members from the county and city were present. The minutes of last regular meeting were read and confirmed.

Dr. Winskill read a paper on " Traumatic-Meningitis," which originated in an injury to the ear. A discussion followed in which Drs. Griffin, Burt and Harris took part.

Dr. Griffin related the history of, and the treatment pursued in three cases of fracture of the neck of the femur which had occurred in his practice during the present winter.

Dr. Harris then gave post mortem notes of " Disease of the Kidney." The organ was enlarged from its normal size of a few ounces to about eight pounds, and showed evidence of malignant disease.

The following gentlemen were appointed a committee for the purpose of urging upon the proper authorities in the city and county the necessity of procuring hospital advantages for the place : Drs. Burt, Henwood, Harris, Marquis, Winskill, Philip, Kitchen and Griffin.

The society adjourned to meet at Paris on the first Tuesday in June next.

Selected Articles.

FREQUENT REPETITION OF DOSES.

BY A. A. SMITH, M. D., BELLEVUE HOSPITAL.

GENTLEMEN,—I propose to direct your attention this morning to the subject referred to at my last lecture, namely, the frequent repetition of doses. This subject is a very important one, and one regarding which it is very difficult to establish any arbitrary rules. In the case of chronic diseases, where it is necessary to continue the treatment for a long time, the plan of administering the medicine in larger doses at intervals of five or six hours is probably the best one which can be adopted. For example, if you were prescribing some preparation of iron in a case of anæmia, it would be unnecessary to give it oftener than three times daily. Again, in certain cases it may be desirable to produce the full effect of the drug at a single dose, as in the administration of a cathartic, or of quinine to reduce temperature.

In other cases, however, it is desired, in administering medicinal remedies, to keep up their continued effect, and the question arises, whether we can accomplish this purpose better by giving them in smaller doses at frequent intervals than by giving them in large doses at much longer intervals, the total amount of the drug in the end being, perhaps, the same in either case. It is a fact with which you are acquainted that certain drugs become absorbed and produce their effect upon the system in a very short time, and they may also be eliminated very rapidly, while others act slowly and are eliminated after a longer interval.

The first drug to which I would call your attention in connection with the subject of the lecture is the chlorate of potash. It may not be unknown to most of you that this drug has at times been administered in sufficiently large doses to produce a dangerous inflammation of the kidneys. Special attention has been called to this fact by Dr. Jacobi, of this city, and also by other authors. This danger can be avoided by administering the drug in small doses frequently repeated. In writing the prescription, a teaspoonful of the solution may be made to represent as much of the drug as you wish to give ; or, if it be in a more concentrated form, the patient may add water to it. Grain doses given every half-hour in scarlet fever, diphtheria, tonsillitis, etc., will produce the same results as larger doses, without the danger of the evil effects resulting from the accumulation of the drug in the system, as sometimes happens when it is administered in the ordinary way. Indeed, I believe they will produce better results on the throat inflammations.

For the treatment of neuralgia, croton chlora

has for a long time been given in large doses, as from five to eight grains, repeated every two hours, until fifteen grains are taken. But allow me to suggest what I consider a better mode of administering the drug—that is, to give a grain of it, prepared as you please, either in liquid or pill form, every half hour until the neuralgic symptoms are relieved. A solution of which a teaspoonful represents a grain of the croton chloral may be made, having scarcely any of the bad taste which usually belongs to this medicine when given in large doses. I may here remark that one of the important advantages connected with the frequent repetition of doses is the fact that the medicine may be so largely diluted with water or other vehicle as to be rendered comparatively tasteless, and harmless to the mucous membrane of the stomach.

You will often be called upon to treat very obstinate cases of urticaria, and you will be put to your wits' end to know what to do. The plan ordinarily suggested is to give alkalies, as the bicarbonate of sodium, or magnesium; but, if you will give the patient two grains of the salicylate of sodium every hour or half-hour, you will usually be enabled to effect a cure even in obstinate cases, except those of a chronic nature. Two grains of the salicylate of sodium administered in a teaspoonful of water is almost tasteless, and may be given without producing disturbance of digestion. Urticaria is often caused by the administration of full doses of balsam of copaiba in cases of urethritis, or inflammation of other mucous membranes, and it may seem strange to you when I make the statement that a single drop of the same drug given every half-hour will sometimes control urticaria. I have no explanation to offer, but I make the statement not alone upon the authority of others; I myself have often observed the efficacy of the treatment, although not so frequently as in the treatment by the salicylate of sodium.

Fowler's solution, or the liquor potassii arsenitis, half a drop given every half-hour for six or eight doses, will often relieve the vomiting which occurs after a debauch. It will also relieve the morning vomiting of drunkards, and is of decided benefit in the sympathetic nausea and vomiting of pregnancy.

Jaborandi has been given in large doses with a view to exciting perspiration in cases of Bright's disease, but the very serious objection has been found to its administration in this manner, that it sometimes has a very depressing effect upon the heart's action, resulting in some cases fatally. Now, five to ten-minim doses of the fluid extract of jaborandi given every hour or half-hour will produce marked perspiration without causing any unpleasant effects upon the heart. I sometimes combine with the jaborandi the tincture of digitalis, with a view to counteract any possible evil in-

fluence which the former drug may have upon the heart. So dangerous do I consider large doses of jaborandi that I often hesitate long before administering it, especially in the uræmia of the puerperal state.

The next preparation of which I shall speak is a solution of the sulphate of atropine, one-hundredth of a grain in a goblet of water, a teaspoonful of which shall constitute a dose, amounting in all to about sixty doses. Now, you will often be called to see cases of supposed croup, but which, in the majority of instances, prove to be cases of false croup of a reflex origin. Ordinarily, you will be able to relieve these patients by giving them a teaspoonful of this preparation every hour. It is possible the remedy acts slightly as a stimulant of the respiratory centre; it is also possible that it has some influence upon muscular contraction or relaxation; at all events, clinical experience proves that it is of benefit in these cases. The dose may be repeated every hour or half-hour, according to the severity of the attack. If the child's face begins to flush and show signs of the physiological effects of the drug, the dose can be reduced in frequency. It should be remembered that when thus administered the equivalent of a full dose of the drug will soon be reached. Do not forget in these cases to give an emetic if there is anything in the stomach which may be causing the spasm, or a cathartic if there be reason to suspect intestinal disturbance as the cause.

The bromides are largely used in the treatment of the nervous and febrile disturbances of children, but an objection to them is the fact that the little patients do not take them readily, because of the taste; the bromide of sodium is, perhaps, as little disagreeable as any of the preparations. This objection can be avoided by giving small doses frequently repeated; for instance, a few grains dissolved in half a tumbler of water, a teaspoonful representing a half-grain, or a grain even, administered every ten or fifteen minutes. When given in this manner, the bromides often prove of great benefit in the nervous disturbances arising from dentition and other causes, and in relieving the fever which, in children, usually attends a slight degree of excitement of any kind. I have seen an elevation of the temperature in children where it could not be traced to any other cause than the excitement incident to their afternoon play. A temperature which might indicate a sickness of considerable gravity in the adult, if it occur in a child may be of comparatively little importance. In such cases the bromides, administered in small doses, say a grain or two at intervals of ten or fifteen minutes, will often prove of great benefit.

You will often meet with children of a nervous, excitable frame of mind, who are, perhaps, naturally of a sensitive, nervous temperament, who are disturbed by the slightest noise, and are unable to

go to sleep before ten or eleven o'clock at night. In such cases you will find it necessary to give a nervous sedative. An excellent effect will be produced by chamomilla in some one of its forms, as the tincture, administered in minim doses, every fifteen or twenty minutes. It is a tonic as well as a sedative. It is a better sedative in such cases than the hydrate of chloral, which is liable to affect the digestion. It is harmless when given in larger doses. Put a teaspoonful into a half-tumblerful of water, and let the child drink it freely.

One of the most important remedies which can be administered with great benefit in frequently repeated doses is ipecac. You are aware that a teaspoonful of the syrup of ipecac is likely to produce emesis; but it is always a fact, regarding which I was at first quite skeptical, that a single drop of the wine of ipecac will often arrest obstinate vomiting. It should be repeated every ten or fifteen minutes. When administered in this manner, I have often known it to relieve vomiting from different causes, among which are pregnancy and subacute gastritis. Children often vomit from very slight causes, and are liable to suffer from diarrhoea and vomiting which have no other assignable cause than disturbance of digestion. A single drop of the wine of ipecac, repeated every fifteen or twenty minutes, will often produce the most marked relief, both from the vomiting and from the diarrhoea. Administered in this manner, the drug is not nauseous, and is easily taken.

I now make a statement, upon the authority of Trousseau and his enthusiastic successor, which may appear to you, as it once did to me, incredible—viz., that one sixtieth of a grain of calomel taken every hour for ten or twelve hours will relieve the headache of syphilis occurring at night. I have administered it in one fortieth-grain doses in this manner and have obtained the results which they claimed for it, but I have not yet tried it in sixtieth-grain doses. The relief was very marked by the second or third night. It is not intended to take the place of iodides which are given in such cases. Doubtless the calomel, when administered in such small doses, is all taken up into the system.

Nursing children often vomit or regurgitate their food; this has been relieved repeatedly in my experience by giving them a teaspoonful of a solution of one grain of calomel to the pint of water every ten or fifteen minutes. In order to dissolve it, the calomel should first be put into an ounce of lime-water, and then into the pint of pure water. One twenty-fourth of a grain of mercury with chalk, administered every fifteen or twenty minutes, is often of great benefit in the vomiting and non-inflammatory diarrhoea of children. Where the diarrhoea is accompanied by mucous passages, indicative of a certain degree of inflammatory action, or enteritis, benefit will be derived

from the administration of one teaspoonful of a solution of bichloride of mercury (corrosive sublimate), one grain to the quart, every hour. The dose may seem very small, but it must be remembered that the dose for an adult is only one-sixtieth to one-thirtieth of a grain, and, when administered in this manner, the full dose for a child is reached within a few hours.

For the diarrhoea of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but not true dysentery, five drops of castor-oil, given every hour in water with sugar and gum, is an excellent remedy.

Another extraordinary statement, which at first seemed to me to be fabulous, and may seem so to you, but which, nevertheless, you will find to be based upon clinical facts: Put a grain of tartar emetic into one quart of water; teaspoonful doses of this solution every half-hour will prove effectual for the relief of the wheezing and cough accompanying a slight bronchitis in children.

It is well known that cantharides, when given in large doses, is liable to cause inflammation of the urinary tract; but it has been found that a single drop of the tincture every hour will in many cases relieve vesical catarrh.

You probably have heard that digitalis has been used in cardiac disease. Certainly if you have not heard of it you will, and, if you have already heard of it, you will hear of it again, particularly at the clinics. Ordinarily, it is administered in considerable doses only three or four times a day, but I do not hesitate to say that the frequent repetition of small doses will produce much more benefit than larger doses at longer intervals. A single drop of the tincture of digitalis, given to a patient suffering from symptoms due to organic heart disease when digitalis is indicated, administered at intervals of an hour or half-hour, according to the severity of the symptoms, will often give greater relief than larger doses, and without liability to ill effects.

A gentleman of this city, of authority in the specialty of venereal diseases, says he has given greater relief in a short time, in cases of orchitis and epididymitis, by the administration of two-minim doses of the tincture of pulsatilla every hour than by any other mode of treatment. I can testify to the great benefit derived from the drug administered in this manner in dysmenorrhoea not of a membranous, obstructive or neuralgic character.

One of the most distressing symptoms from which many women suffer at the menopause is flatulence, and a sensation of fluttering or palpitation at the pit of the stomach, an effectual remedy against which is the extract of calabar bean in one-fiftieth-grain doses, repeated every half-hour for six or eight doses. It may be repeated in the same way after stopping it for three hours.

In cases of amenorrhoea not dependent upon

anæmia, benefit may be derived from minim doses of the fluid extract of ergot administered every half-hour for five or six hours the day before the flow should begin, and again on the day on which it should occur. Contradictory as it may seem, when administered in the same manner the fluid extract of ergot is of benefit in cases of excessive menstruation.

Aconite is one of the drugs to which you will probably have occasion to resort frequently when you enter upon the active practice of medicine. It has for a long time been used in quite small doses, but not so frequently repeated as it might be with benefit. There are many cases of febrile movement, with dry, hot skin, a full, bounding pulse, the mucous membrane of the throat and nose probably dry—cases in which the febrile movement is not the commencement of one of the continued fevers; the tincture of aconite, one-third to one-half a minim, given every fifteen minutes, will be found of decided benefit. Visiting the patient shortly after the commencement of this treatment, you will often find him in a little perspiration; the medicine may then be administered at longer intervals, every half-hour or longer, according to the indications. The tincture of aconite, administered in a similar manner, is also useful in cases of commencing so-called cold in the head. It is likewise useful in cardiac hypertrophy with palpitation, severe headache, and disturbances of the nervous system due to increased force of the heart-beat.

Two minims of the tincture of hamamelis every half-hour will often control hæmorrhages. I was at first inclined to look upon this statement with a great deal of distrust, but I have since tried it in cases of hæmorrhage from the nose, from the uterus, and in the hæmorrhage from hæmorrhoids, and have found it of great benefit.

The tincture of belladonna in minim doses, given every half-hour, is a good remedy in cases of nasal catarrh and bronchitis accompanied by free secretion. You should cease to give the drug for a while after eight or ten doses have been administered, as it is less quickly eliminated from the system than the other medicines of which we have already spoken. In cases of pulmonary œdema with failure of heart power, belladonna thus administered is of benefit in retarding the exudation of serum, and in overcoming the failure of heart power.

Two grains of the chloride of ammonium, combined with ten or fifteen minims of the tincture of cubebs, given every half-hour, oftentimes controls acute pharyngitis and superficial inflammations of the other tissues about the throat. For inflammation of the throat dependent upon a gouty diathesis, add to this mixture ten minims of the ammoniated tincture of guaiac, and administer every hour.

In the headache of migraine, one grain of the citrate of caffeine given every half-hour will often produce most marked relief. In neuralgias about

the face or head, three-minim doses of the tincture of gelsemium every half-hour will often act almost miraculously and leave no ill effects. A single drop of the tincture of nux vomica given every ten minutes will often produce most marked relief in sick headache not of a neurotic origin. It should be given immediately after or soon after meals. For certain kinds of headaches (especially those which are periodical and not of malarial origin), fifteen-minim doses of fluid extract of guarana given every fifteen minutes will very frequently relieve. If it does not relieve in four doses, increase the dose to thirty minims.—*N. Y. Med. Journal.*

THE TREATMENT OF ACUTE RHEUMATISM.

BY DR. ROBERTS BARTHOLOW (*Medical Record.*)

No one can give anything like attentive consideration to the types of rheumatic cases without perceiving that they may be resolved into three groups, as regards the characteristics of the individuals composing them:

1. Spare persons of considerable bodily vigor, good muscular development, and having a distinct family history of neurotic or rheumatismal disorders.

2. Obese subjects, addicted to malt liquors and good living, sometimes with—more often without—an inherited predisposition to rheumatic diseases; the gelatinous descendants of albuminous parents, as they have been entitled.

3. The feeble, pale, anæmic subject, depressed by poor diet and evil hygienic surroundings, including dampness and bad air.

No one can treat cases of rheumatism successfully unless he recognizes the type before him and adapts his remedies accordingly.

The first type is comparatively frequent and found amongst the best elements of our mongrel population. Besides the inherited tendency, such subjects are prone to indulge in a rich diet of animal food, sauces and wines, and to pursue rather sedentary occupations, or an in-door life. In these cases, salicylic acid, or the salicylate of soda, renders an incontestible service. There are, however, some practical details regarding its administration of great moment in respect to the permanency of the results. It is quite certain that in this group of rheumatic cases, full medicinal doses of salicylic acid, or of the salicylates, will speedily arrest the pain and diminish the fever. The lowering of the temperature seems to bear a constant ratio to the diminution of the pain. It is not possible to express in figures with exactitude the doses necessary; the curative effect is attained by that quantity which reduces the pain and the tem-

perature. In suitable cases, the administration of this remedy removes all of the more prominent symptoms and establishes convalescence in three or four days. Unfortunately, in a considerable proportion of cases, the disease manifests a strong tendency to relapse, after a marked subsidence of the acute symptoms which apparently indicates the beginning of convalescence. A rule of practice has been distinctly formulated since this tendency to relapses has become well known. It is this: Give the remedy for several days after the acute symptoms have ceased. I have attempted, from my own experience, to give numerical expression to this rule, with the following result:

Salicylic acid, or the salicylates, should be given after the subsidence of the acute symptoms, and the cessation of the fever and pain, for the same number of days as the acute attack lasted. Thus, if the decline of fever and pain occurred on the fourth day, the remedy should be continued as many days thereafter, or for four days subsequent to the apparent cessation of the acute symptoms.

The second class of rheumatic subjects contains the obese, or those of full habit, the rotund addicted to nialt liquors and to good living, all of whom are apt to suffer from a form of acid indigestion. The cases of rheumatism occurring in such subjects are, as a rule, much benefited by the alkaline treatment. This method is an empirical attempt to cure a disease characterized by an excess of acid in the various secretions. Dr. Fuller, the author of an excellent work on rheumatism, has been the most prominent advocate of the alkaline method.

"By the 'alkaline treatment,'" says Dr. Fuller, "I mean a plan of treatment in which alkalies play an important part, but which consists not only in the administration of alkalies, ($1\frac{1}{2}$ ozs. in 24 hours) but in the careful regulation of the secretions, the strictest attention to diet, and the administration of tonics, such as quinine and bark, as soon as the patient can bear them. As soon as the urine, when freshly voided, ceases to show an acid reaction—which is usually the case after twenty-four hours—the quantity of the alkali is diminished by one-half, six drachms only being administered during the succeeding twenty-four hours. At the expiration of that time, if the urine remains alkaline, three drachms only are given in the next twenty-four hours; and on the fourth day, if the urine still shows an alkaline reaction, the form of the medicine is altogether changed. The treatment ceases to be essentially alkaline; either a cinchona draught is ordered to be taken three times a day, containing a scruple or a half drachm of bicarbonate of potash—a little more or a little less according to the condition of the urine, which should be kept nearly neutral—or three grains of quinine dissolved in lemon-juice is given three times a day in effervescence, with half a drachm of bicarbonate of potash or soda."

The third case of rheumatic cases, and numerically the most important, probably, also pathologically, the most serious, is the feeble and anæmic subject. A rheumatic of this kind is pale, rather thin, the muscles weak and wanting in firmness, the chest narrow and somewhat flat, the joints prominent and lax. In such persons an extension of the rheumatic inflammation from joint to joint, until almost all the joints of the body are involved, is to be feared, as it is of frequent occurrence. Cardiac complications are relatively frequent. It need hardly be observed that in such subjects the depressing effects of salicylic acid and of the alkalies are to be dreaded. Here clinical experience is in entire accord with theory. We owe to Dr. Russell Reynolds, of London, the introduction of a remedy for acute rheumatism, which is especially suited to this group of cases. I refer to the *tincture of the chloride of iron*. To be effective it must be given in full doses—from 3 ss. to 3 j. in sufficient water every four to eight hours. It lessens the swelling and pain of the joints, lowers the fever, diminishes the tendency to heart complication, and, above all, sustains the vital powers in their struggle against the encroachments of the rheumatic disease.

I am far from denying that cases of rheumatic fever in these anæmic subjects would not be relieved by salicylic acid, but I do affirm that so much depression would result that relapses would occur, and the convalescence would be prolonged owing to the remarkable depression of the nutritive functions. The same state of things results from the administration of alkalies. The blood is spoiled, the heart enfeebled, and complications of various kinds invited. On the other hand very conspicuous benefit results from the vigorous administration of the tincture of iron. Besides its influence over the course of the disease—shortening its duration by checking waste, and preventing complications by maintaining the vital resources—the tincture of iron, as shown by the late Dr. Anstie, has a distinct prophylactic effect, so that, when the attack is threatened, will, by timely administration, prevent it.

During the period of convalescence from acute rheumatism, after the treatment by salicylic acid and by alkalies, the tincture of iron in the full doses already advised renders an important service. The tenderness and effusion about the affected joints, the subfebrile temperature, and the condition of anæmia, are alike greatly improved by its administration in efficient doses. I have repeatedly observed that cases which lingered long on the hands of the physician after the acute symptoms had subsided, quickly improved and recovered when efficient doses of the tincture of iron were administered, and, at the same time, suitable blisters were applied to, or about, the affected joints.

Independently of the considerations above ex-

pressed regarding the utility of blisters, the "blister treatment" of acute rheumatism is deserving of careful consideration. Blisters in various ways, and applied in accordance with various notions, have long been used in the treatment; but the "blister treatment," properly speaking, of acute rheumatism has been systematized by Dr. Davies, of the London Hospital, and Dr. Dechilly, of France. The latter, however, applied a large blister to cover the joint, and permitted it to remain on until sufficient inflammation occurred to produce abundant serosity. Dr. Davies, on the other hand, was content to apply the blisters around rather than on the joint itself. It is a remarkable fact that blistering brings about a neutral or alkaline condition of the urine, how acid so ever it may have been before the blisters were applied. More or less strangury occurs in some instances. So remarkable is the relief to pain produced by the blisters that patients petition for their renewal from time to time. Cardiac complications are comparatively infrequent, and the duration of the disease is reduced to the limits of the favorable cases. Indeed, I may sum up the testimony as to the efficiency of this method in the words of Dr. Greenhow, who affirms that the treatment of rheumatism by blisters is quite as successful and less objectionable than by salicylates. The good effects of the blister treatment afford a strong justification of the neurotic theory. When first ascertained, the result was ascribed to the withdrawal of a quantity of acid serum from the neighborhood of the affected joints. The change in the character of the urine, induced by successive blisters, rendered further explanation necessary. The increase of our knowledge respecting the influence of peripheral irritation on the state of the nerve-centres, and especially on the trophic system, has paved the way to a better appreciation of the facts; nevertheless the final explanation remains to be made. A combination of the blister treatment with salicylic acid, with alkalies, or with the tincture of iron, may often be made with signal advantage.

The importance of a proper diet is not less than is stated by Dr. Fuller in the quotation made from his paper. Solid food should not be allowed in any case. Liquids composed of starchy and saccharine matters are only less hurtful. Milk and animal broths are the articles to be depended on chiefly until the cessation of all joint troubles will permit the gradual restoration of a solid dietary. Lemonade and carbonic acid water are allowable, unless they produce flatulence, when they will excite fresh joint mischief. Anodynes are to be avoided if possible; when necessary, atropine is preferable to morphine, if adequate to relieve the pain, which it usually succeeds in doing. The complications which may arise in the course of rheumatic fever demand more careful treatment than I can give them at the conclusion of this article.

THE "WEIR MITCHELL" TREATMENT OF HYSTERIA AND ALLIED DISEASES.

Dr. W. S. Playfair concludes an interesting and quite exhaustive article on this subject as follows:

The principal elements in the systematic treatment of these cases are—

1. The removal of the patient from unhealthy home influences and placing her at absolute rest.
2. The production of muscular waste and the consequent possibility of assimilating food by what have been called "mechanical tonics," viz: prolonged movement and massage of the muscles by a trained shampooer, and muscular contractions produced by electricity.
3. Supplying the waste so produced by regular and excessive feeding, so that the whole system, and the nervous system in particular, shall be nourished in spite of the patient.

On each of these I shall offer one or two brief observations:

1. The removal of the patient from her home surroundings, and her complete isolation in lodgings with only a nurse in attendance, is a matter of paramount importance. This is a point on which I am most anxious to lay stress, since it is the great crux to the patient and her friends; and constantly appeals are made to modify this, which I look upon as an absolute *sine qua non*. I attribute much of the success which I have been fortunate enough to obtain in my cases to a rigid adherence to this rule. In almost every instance of failure in the hands of others of which I have heard, some modification in this rule has been agreed to, in deference to the wishes of the friends—as, for example, treating the case in one room by herself in her own house, or in admitting the occasional visits of some relatives or friends. While, however, the patient is to be rigidly secluded, it is incumbent to secure the attendance of a judicious nurse, with sufficient intelligence and education to form an agreeable companion. To shut up a refined and intellectual woman for six weeks with a coarse-minded, stupid nurse can only lead to failure. I have had more difficulty in obtaining suitable nurses, sufficiently firm to insure the directions being carried out, and yet not over-harsh and unsympathetic, than in any other part of the treatment. Whenever my case is not doing well, I instantly change the nurse—often with the happiest results. In adding to the isolation the patient is put at once to bed, to secure absolute rest. In many cases she is already bedridden; in others there has been a weary, protracted effort, and the complete repose is in itself a great gain and relief.

2. Under the second head comes systematic muscular movement, having for its object the production of tissue waste. This is administered by

a trained rubber, and here again is a great practical difficulty. The so-called professional rubbers are, in my experience, worse than useless, and I have had to teach *de novo* a sufficient number of strong, muscular young women; and the aptitude for the work I find to be very far from common, since a large proportion of those I have tried have turned out quite unsuited for it. I cannot attempt any description of this process. I need only say that it consists in systematic and thorough kneading and movements of the whole muscular system for above three hours daily, the result which at first is to produce great fatigue, and subsequently a pleasant sense of lassitude. Subsidiary to this is the use of the faradic current for about ten to twenty minutes, twice daily, by which all the muscles are thrown into strong contraction and the cutaneous circulation is rendered excessively active. The two combined produce a large amount of muscular waste, which is supplied by excessive feeding; and in consequence of the increased assimilation and improved nutrition, we have the enormous gain in weight and size which one sees in these cases, it being quite a common thing for a patient to put on from one to two stones in weight in the course of five to six weeks. The feeding, at regular intervals, constitutes a large part of the nurse's work. At first from three to five ounces of milk are given every few hours; and for the first few days the patient is kept on an exclusive milk diet. By this means dyspeptic symptoms are relieved, and the patient is prepared for the assimilation of other food. This is added by degrees, *pari passu* with the production of muscular waste by massage, which is commenced on the third or fourth day. By about the tenth day the patient is shampooed for an hour and a half, twice daily, and by this time is always able to take an amount of food that would appear almost preposterous did not one find by experience how perfectly it is assimilated, and how rapidly flesh is put on. It is the usual thing for patients to take, when full diet is reached, in addition to two quarts of milk daily, three full meals, viz: breakfast, consisting of a plate of porridge and cream, fish or bacon, toast and tea, coffee and cocoa; a luncheon, at 1 p. m., of fish, cutlets or joints, and a sweet, such as stewed fruit and cream, or a milk pudding; dinner at 7 p. m., consisting of soup, fish, joints, and sweets; and, in addition, a cup of raw meat soup at 7 a. m. and 11 p. m. It is really very rare to find the slightest inconvenience result from this apparently enormous dietary. Should there then be an occasional attack of dyspepsia it is at once relieved by keeping the patient for four and twenty hours on milk alone.

Such is a brief outline of the method to which I am here to direct your attention. As to the results, I have already published several remarkable illustrative cases, so that it is perhaps not neces-

sary to do much more in this direction. I may say, on looking back at my cases, that the only ones with which I have any reason to be disappointed are those in which the primary selection has been bad; and in the few in which the results were not thoroughly satisfactory, I had doubts as to their suitability for the treatment, which I expressed beforehand. These include one case of chronic ovarian disease, and one of bad ante-flexion with fibroid enlargement of the uterus, in both of which the local disease prevented any really beneficial result. In the third I had to stop the treatment in a week, in consequence of cardiac mischief; two others were cases of positive mental disease, and in one case there was true epilepsy. I have no doubt that any positive coexistent organic disease of this kind should be considered a contraindication. In my other cases the results have been all that could be wished, and in many of them the patients have been restored to perfect health after having been helpless, bedridden invalids for years; in one case twenty-three without ever putting a foot to the ground, in others sixteen, nine, six, and so on. In two instances my patients were in such a state that it was found absolutely impossible to move them except when anesthetized; and they were brought to London by the medical men long distances under chloroform, in each case leaving in six weeks perfectly cured.

HIGH FORCEPS OPERATION.

BY PROF. BRAUN.

A case of the high operation which Prof. Carl Braun performed upon Wednesday, November 8, before the class will serve to convey the teachings of the Vienna School upon a number of important subjects in relation to the use of forceps.

The patient, a native of Austria, unmarried, thirty-two years old, in her fifth pregnancy at full term, felt labor pains towards the evening of November 7, and entered the lying-in ward of the First Obstetrical Clinic at 2.30 A.M. November 8. Abdominal palpation revealed pregnancy at full term, a large child, head presentation, first position. Heart tones were loud and regular. By combined external and vaginal examination a contracted pelvis was demonstrated. The measurements were:

Distance between the anterior and superior spine,	21 $\frac{1}{2}$ cm.
Distance between the iliac crests,	25 $\frac{1}{2}$ "
" " trochanters,	30 $\frac{1}{2}$ "
External conjugate diameter,	18 "
True " " " " " " " " " " " " " " " "	8 $\frac{1}{2}$ "
Abdominal circumference,	82 "

The os became fully dilated at 5 o'clock A.M., and the rupture of the bag of waters occurred

some moments later. The head engaged in the superior strait and advanced very slowly until a segment of one-third its volume was within the pelvic cavity. The head now became firmly fixed, with the sagittal suture in the transverse diameter, and a considerable caput succedaneum began to form. The corpus uteri continued to contract powerfully, at regular intervals, without effecting in the slightest degree any change in the position of the head, while the collum uteri became distended, and finally reached to the umbilicus. Later the condition of tetanus uteri was observed, and the corpus uteri could be felt as a firm hard tumor above the umbilicus, very sharply differentiated from the distended, relaxed collum uteri, situated below. At 11.30 o'clock A.M., the woman received a hypodermic injection of morphia, and at 12.30 o'clock P.M., she was taken into the lecture-room for the application of the forceps.

Prof. Braun, after careful disinfection of his hands by liberal use of a 3 per cent. solution of carbolic acid, 10 per cent. solution of potassium permanganate, a solution of hydrochloric acid of similar strength, green soap and a brush, examined the woman, and confirmed the diagnosis previously made in the lying-in ward. He said the child would weigh more than 3500 grammes, and would have a greater length than 50 cm. After catheterization, the vagina and external genitals of the patient were copiously irrigated with a 3 per cent. solution of carbolic acid, immediately before the application of the forceps.

While Prof. Braun is in no sense of the word a strict disciple of Lister, he is no disbeliever, and always gives his patient the benefit of a doubt, with the exception of the spray. In passing, it may be mentioned that careful irrigation with disinfectant fluids was employed under his direction long before Esmarch called public attention to the subject.

For the operation, Prof. Braun selected his own instrument. This is the long forceps of Sir James Simpson, with the fenestræ closed by a thin metallic plate (Hohl's modification), the whole instrument, including handles, being covered by a thin layer of hard rubber. The weight of the instrument is 600 grammes.

The advantages claimed for the instrument are:

1. The impermeable, smooth surface.
2. The easy, antiseptic cleansing, because septic material finds no lodgement in any groove.
3. The durability, because hard rubber resists rust, chloroform, chloride of iron, carbolic acid which is not the case with the nickel or gold-plated instrument.
4. The instrument requires no heating apparatus.
5. The avoidance of all sharp, metallic angles and points, which injure the skin of the head and face.
6. The obliteration of the fenestræ prevents the feathering of the blade.

Prof. Braun speaks in unmitigated terms of disapprobation of Tarnier's forceps, Alexander Simpson's instrument, and Felsenreich's modification of the last-named forceps. Felsenreich's forceps, which have been used at the clinic for some months past, present few points of difference from Alexander Simpson's original instrument. For the past six months there has been much discussion in the Vienna Obstetrical Societies as to the value of the last-named three instruments. For this reason, Prof. Braun has allowed his assistants to use them at the clinic. The results, upon the whole, have not been favorable. Mother and child have, in a number of cases, sustained serious injury. Prof. Braun himself never uses these instruments, and pronounces the principle to be radically false, and the instruments themselves a fashionable folly ("Moderner Schwindel").

The patient having been slightly chloroformed, was placed upon her back, with her lower extremities elevated, and the blades of the forceps were adapted to the long diameter of the foetal head, the maternal tissue being guarded by the introduction of four fingers above the pelvic brim. Seated quietly in his chair, the operator applied traction in the axis of the pelvic brim, and after a few, though sometimes powerful efforts, brought the head down into the middle of the pelvic canal, where rotation was effected by readjustment of the blades, and the birth of the child rapidly followed.

Prof. Braun never uses the forceps as a *lever* or *compressor*.

The child proved to be a male, weighing 3900 grm. with a length of 52 centimetres. The child was profoundly asphyxiated, but when the cerebral congestion was relieved by its elevation above the level of the placenta, the breathing became normal, and the facial hyperæmia disappeared. The placenta was at once expelled, the corpus uteri being thrust downwards towards the symphysis in such a manner as to cause complete descent of the collum uteri into the cervical canal. The collum uteri folded upon itself as if telescoped.

When the cord ceased to pulsate, 30 minutes after its delivery, it was severed, but not ligated. This departure from custom was made, in order to show that ligation of the cord, after cessation of pulsation, is not a scientific necessity.

Prof. Braun is not an iconoclast, however, and in the lying-in ward all umbilical ends are ligated in two places. After careful irrigation of the vagina with a 3 per cent solution of carbolic acid, an iodoform tent, weighing 5 grammes, was introduced into the uterus.

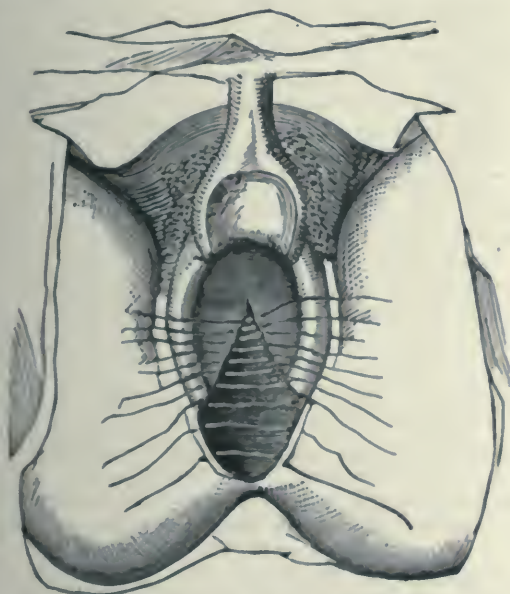
At the time of writing, both mother and child are thriving.—*Medical News*.

Governor Cleveland, of New York, last Monday signed the bill prohibiting the manufacture of cigars in tenement houses in New York city.

PRIMARY OPERATION IN LACERATED PERINEUM.—NEW METHOD.

[Dr. W. L. Barret, Prof. of Diseases of Women in the St. Louis Medical College, describes, in the *Courier of Medicine*, Feb'y, '83, a new method of performing the primary operation for laceration of the perineum. We extract the following which gives in detail his plan of operating.]—ED.

The plan I have pursued is to place the patient in the usual position on the back, with the legs flexed on the abdomen. A satisfactory light is indispensable, and if an artificial light is employed a reflector will be of signal service. The parts are sponged off, and a sponge inserted into the vagina to prevent the uterine hemorrhage from obstructing the view. The vaginal sponge having been introduced, a Sims' speculum is inserted into the anterior commissure of the vulva. This exposes the posterior surface of the vagina to the view of the operator, and he can plainly see the whole extent of the rent. Then, with a very fine, short, straight needle, with a trocar point, armed with very fine silk, and held with a needle forceps, the operator begins at the superior or vaginal extremity of the rent, and stitches the mucous membrane together, from above downwards. The sutures are simple interrupted sutures, cut off short on the vaginal surface and left to ulcerate out. Five or six sutures are used to the inch. The needle is entered and brought out only a line or two from the torn edges, so that the suture embraces very little tissue.



The cut shows the patient, and speculum in position, and indicates the method of introducing the sutures. The highest suture, viz., that at the superior extremity of the rent, is inserted first, and the lowest last. It also conveys an idea of the

amount of tissue embraced by each suture. No matter how serpentine and ragged the rent may be, it is accurately followed with the needle from its commencement on the vaginal surface to the edge of the fourchette. No trimming of serrated or irregular edges should be resorted to; but, on the contrary, every tongue of tissue should be fitted into and stitched down to its proper place so accurately that the mucous surface cannot gap and discharges cannot enter. The point on which the success of the operation turns, and the only point worthy of consideration in the proceeding, is the exact approximation of the edges of the mucous surface. It is not necessary either to effect apposition or to maintain apposition of the lacerated parts that the sutures should be strong or that they should embrace much tissue in their grasp.

The perineum, normally only $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in length, is during labor stretched to four or five inches in length. Immediately after labor the parts are flaccid and elongated; and if the torn surfaces are placed in apposition, in the same relationship that they occupied before the injury, they fit together as naturally and as accurately as an oyster fits into its shell. There will be no tension on the sutures, and no disposition to a separation of the lacerated surfaces; but, on the contrary, the contraction that takes place in the perineal tissues, as involution progresses and the parts resume their ante-partum condition, tends to draw the severed surfaces into closer apposition, and thus contributes to the success of the operation. If the parts have been drawn by deep perineal sutures into artificial relationship, the normal change referred to disturbs the apposition that is forced and unnatural, and opens sinuses, into which irritating discharges percolate and prevent union.

When the mucous membrane has been closed in the manner described, the tear in the perineum will also be closed, and I believe that the passage of sutures through the cutaneous surface might be entirely dispensed with; but it has been my habit to introduce one or two superficial stitches, because it approximates the parts more perfectly and insures a neater appearance. I do not believe the external sutures are absolutely essential. I do not bind the limbs together, draw off the urine, nor constipate the bowels, but treat the patient in all respects as if no operation had been performed. On the fourth or fifth day the external sutures are removed. Those in the vagina are left to ulcerate and come away spontaneously. The operation, performed in this way, is simpler, less painful, more rational, and, I believe, more certain in its results than when the usual method is adopted.

BORACIC ACID IN THE TREATMENT OF OTORRHOEA.—A paper was read at a meeting of the State Medical Society of Pennsylvania, by Dr. Charles S. Turnbull, of Philadelphia, from which we quote the following:

"A most gratifying experience in the use of powdered boracic acid in the treatment of chronic purulent inflammation of the tympanic mucous membrane, the constant symptom of which is otorrhœa, has induced me to consider the antiseptic, or what might be more accurately termed the '*dry method*' of treatment. The marked success that I have met with, induces me to advocate its use in this most frequent form (in this country) of aural disease. Chronic purulent inflammation of the middle ear continues its work of destruction year in and year out, gradually corroding the contents of the middle ear and seriously compromising the functions of its appendages. Upon these delicate parts, covered by an inflamed or ulcerated mucous membrane (which, it must be remembered, acts the part of the periosteum), all sorts of foreign material collect, and these with the added irritation from fermenting discharges (caused by the high temperature of the parts, collections of the bacteria, etc.,) increase the fire of inflammation which burns fiercely, and the mucous membrane, in defence of itself, pours out a copious secretion. To remedy these affections, general surgery has done but little, so that in many instances medical men are glad to get rid of 'patients with running ears,' and this added to the prejudices in the minds of the community at large, and in some of the profession too, as to the injurious effect of healing or 'drying up' as it is termed, discharges from the ear, has caused this affection, through ignorance or apathy, to be much neglected.

"Bezold conceived the idea that boracic acid had failed on account of the powder used. He therefore procured *boracic acid in an impalpable powder*, and when he began *packing the meatus tightly* with it, obtained excellent results. Since Bezold's paper, Bückner speaks highly of the powdered acid in the otorrhœas, and Dr. J. O. Green also recommended Bezold's treatment, which he had used extensively in the meantime. From that time to the present, with few exceptions, the treatment recommended by Bezold and Green was given a trial, but although Politzer, of Vienna, recommended it highly, and Cassells, of Glasgow, did the same thing, no one was satisfied that the plan of treatment was particularly efficacious, or to be preferred to many others. The great mistake, as I have discovered, was in the fact of many experimenters not having observed Bezold's instructions, namely, that *boracic acid must be nicely powdered*. The ear is not to be syringed at all; it should be cleansed with absorbent cotton. According to the character of the intra-tympanic secretion am I guided in the introduction of the antiseptic powder, hence especial note must be made of the exact variety of the discharge as regards color, odor, consistency, etc., etc.

"As the cleansing procedure is more or less apt to provoke reflex coughing, it must be gently and

carefully done; *in fact, the successful treatment of any case greatly depends upon the method of cleansing the meatus*. If it be carelessly done more discharge will be provoked, and an artificial eczema, aggravated by the powder used, defeats the objects sought by a thorough cleansing. The powder is to be poured into the speculum, *ad libitum*. A little will drop through, but the bulk of the powder will remain in the speculum and this will require displacing and *packing*. To hold the speculum still and pack down the powder without causing pain from the edges of the speculum is no easy procedure. Force cannot be employed because by the pressure the edges of the speculum will cut; then too, and suddenly, the mass moves, and whatever is used to thrust it down is apt to impinge, with more or less force, upon the delicate parts beneath. I use a thin steel probe with the point (about 1 line) bent at a right angle, and whilst the auricle and speculum are held immovable, the parts being illuminated with the head mirror, (the head of patient unmoved from first position) I hug the inside wall of the speculum, and so can always tell when I am down to its lower orifice. As the powder is filled into the meatus, through the speculum, it is *packed*, layer upon layer, not tightly, but firmly, meanwhile I gradually withdraw the speculum until it reaches the mouth of the meatus. Here I insert a light pledget of cotton, only to be worn for six or eight hours (until bed time), and then to be withdrawn and not again introduced. My directions to my patients are to permit, in fact, endeavor to have all the powder possible remain within the meatus. If any moisture be felt, sop (that is, wipe by pressing) the mass, and soak out the discharge with absorbent cotton or dry thin linen, but do not disturb the powder. From the moment this agent is used all odor, from the most fetid discharges, ceases, and unless the discharge be extraordinarily profuse, never returns. No reaction ensues if filled into meatus as I have directed. Of course, the mechanical deafness caused by the foreign mass in the meatus was sometimes complained of, but this was gladly endured when explained as only of a temporary nature.

"Oftentimes one packing was enough. In other cases, the packed powder was washed out, by the discharge, in a few days, but I persevered, and have always been rewarded for any trouble in filling and repacking. If the discharge ceases and leaves a hardened mass of powder, etc., filling the meatus, it must be removed, but not by force nor by syringing. It must be softened by the instillation of warm *fluid cosmoline* (petroleum), which has the charming recommendation of not becoming rancid by heat, etc. I have been compelled to require my patients, for whom the powdered acid has been prescribed, to bring with them the substance procured, for inspection, since druggists, as a rule, unless according to special agreement, dis-

pense a powder, so called, composed, for the greater part, of crystals of the acid. Messrs. Wyeth & Bro., of Philadelphia, have furnished all of the powdered acid that I have used. When properly powdered, no particles can be felt, and in dipping the finger into such a mass the sensation can hardly be said to be that of touch; the impression is that of powdered soapstone, such as is used by the glove and shoemakers."

MEDICAL HINTS "GRATIS."—The following hints off admirably the treatment physicians sometimes receive from their patients:

When you go for the doctor always pull the bell violently, using both hands if necessary. Do not wait a reasonable time for an answer, but pull again and again in quick succession, interposing by way of punctuation an occasional kick at the door with your heel. Such procedure is calculated to make the doctor receive you in an amiable manner. If after midnight, do not consider that the doctor is in bed, but sleeps standing behind the hall door; so no time need be allowed for throwing on even the slightest clothing. When he comes to the door or window, which is determined by the amount of sonorous vibrations you make, for the doctor, though not a cowardly, is a cautious man, always begin the interview with an oath in which some deity, heathen or otherwise, is invoked, interpolating a couple of spasmodic gasps, and finish with "Hurry up," which may be repeated any number of times; the oftener the better. This tends to increase the doctor's amiability, accelerates his dressing, and helps to compose his mind, so that he may the more calmly deal with the particular emergency.

Should the doctor come to the door in his night-shirt and slippers, repeat the oath and other little embellishments, and tell him to run on as he is, not to mind his clothes, that you will carry them. This little act of kindness will please him immensely and will be most fully appreciated during the winter months, more especially if a blizzard be on, or the thermometer be in the forties. Be careful and not tell him anything of the nature of the case on which you summon him, or he may take something to relieve it. Don't hint at your name or where you live; this might be fatal. If you send for him, expect him to run all the way, especially if it be only a mile or two. Should it rain, do not give him half of your umbrella, or if you affect to do so, mind and let it drip upon him. A slight irrigation down his spine cannot fail to be appreciated.

Never send or bring a carriage for him, doctors are not used to indulgences; but should you by mistake do so, do not fail to occupy two-thirds of the seat, and like quantity of the apron or buffalo. Talk to him on any subject but the one which is the object of his visit, and expect his answers to be cheerful and gay. If the call is particularly urgent,

more especially if at night, say the patient has been ill for a week or two, that they could not put off sending for him any longer least the neighbours might talk. This will excite his sympathy and admiration. Be careful and have several skilful old women about, who will try which can make the most wise suggestions, and will cite similar cases which with care in their hands never failed. This will be highly edifying to the doctor and save him the trouble of thinking, for which he will feel grateful.

If the case be surgical—"a fracture of the leg" for instance—some bystander must not omit to declare that the limb is not fractured because the patient can move his toes, or tell him the bone will not begin to knit until the ninth day, or some equally novel piece of reliable information. If the case be a medical one, state aloud, so that both patient and friends may be inspired with hope and comforted by the intelligence, that the patient will surely die at midnight, for you heard the death clock in the wall at that hour the night before. Tell him the best time to give the medicine is in the wane of the moon; or that you consider the dose prescribed too large, and think it best to give only half the quantity, and a few more equally sage and complimentary suggestions, which add greatly to his store of knowledge and good temper, while it ensures you a high place in his affection and esteem, and at the same time tends to make him an amiable and tender-hearted old man.

When you think the illness a dangerous one, tell him to call often—not to spare anything, particularly himself. This may be spoken with increased confidence when you have not the remotest idea of paying him. If you do think of paying him—a very strange occurrence—when you suppose the danger past, ask him if he will have to come again.

"God and the doctor we alike adore
When trouble takes us—not before;
The danger past both are alike requited—
God is forgotten and the doctor slighted."

On his first visit you will say, "My dear Doctor, I am so glad to see you," or some equally warm greeting, and take care that he is properly shown in and out of the house. When getting better you will simply call him "Doctor;" when still better you will be careful to add his surname, be cold and dignified; the servant need not show him in or out now. Should he call after this, leave word with the servant that you sleep and care not to be disturbed. This behaviour cannot fail to be appreciated by his sensitive nature, and cause him to exclaim, "There is nothing so beautiful as gratitude, and confidence reposed."

"Three faces wears the doctor; when first sought,
An angel's—and a God's, the cure half wrought;
But, when that cure complete he seeks his fee,
Satan vile looks then less terrible than he."

REMEDIES FOR HEADACHE.—The following recipes and suggestions for the treatment of differ-

ent forms of headache are collected from a variety of trustworthy sources :

Two grains citrate of caffeine, in capsule, taken every half-hour, is a very effectual remedy in nervous and sick headache. One or two doses are often sufficient to give complete relief. The only objection to its use is sleeplessness, which sometimes results if it is taken in the evening. It is preferable to guarana as being hardly ever rejected by the stomach.

The following, according to Dr. W. W. Carpenter, is very effectual in most forms of headache : Muriate of ammonia, 3 drachms ; acetate of morphia, 1 grain ; citrate of caffeine, 30 grains ; aromatic spirits of ammonia, 1 drachm ; elixir of guarana, 4 ounces ; rose water, 4 ounces. Mix. Dessert spoonful every ten or twelve minutes.

In nervous headache, Dr. W. A. Hammond states the value of various drugs as follows :—Oxide of zinc is of great value. Ordinary dose, 2 grains, three times a day, after meals ; maximum dose, 5 grains. It is best given in forms of pills. Nux vomica is preferable to strychnia. The dose is 1-4 grain, after meals. If the patient be chlorotic, it is well to combine a grain of reduced iron and half a grain of sulphate of quinine. Bismuth, in the form of subcarbonate, will often take the place of oxide of zinc. Dose, 2 grains after each meal. Bismuth probably aids digestion more than any mineral tonic, and is of use when there is gastric disturbance. The bromides are serviceable when the nervous system has been irritated ; when it is exhausted they do harm. Phosphorus is very useful in most forms of nervous headache. The best results are obtained from dilute phosphoric acid, in doses of 30 drops, largely diluted, three times a day, after eating, or phosphide of zinc, 1-10 grain, in pill, three times a day. Arsenic, as a nerve tonic, stands next in value to zinc. Dose, 5 drops of Fowler's solution three times a day, after meals. Galvanism is sometimes valuable, but by no means a specific. The *constant current* should always be used, being careful to avoid too great intensity, lest amaurosis is produced.

Dr. T. Lauder Brunton, (*Practitioner*), says : The administration of a brisk purgative, or small doses of Epsom salts, three times a day, is a most effectual remedy for frontal headache when associated with constipation ; but if the bowels be regular, the morbid process on which it depends seems to be checked, and the headache removed even more effectually, by nitromuriatic acid diluted, 10 drops in a wine-glass of water, or bicarb. soda, 10 grains, in water, before meals. If the headache be immediately above the eye-brows, the acid is best ; but if it be a little higher up, just where the hair begins, the soda appears to be the most effectual. At the same time the headache is removed, the feeling of sleepiness and weariness, which frequently leads the patient to complain

that they rise up more tired than they lie down generally disappears.

A writer to the London *Lancet* remarks : At the Middlesex Hospital female patients who have suffered many years from sick headache, evidently of a hereditary character, have been greatly benefited if not cured, by the administration of 10 minim doses of tincture of Indian hemp, three times daily before the attacks. This is well worthy of trial in those cases of ever-living, never-dying martyrdom-like suffering. In headache due to determination of blood to the head and in fever, the following simple treatment is to be commended : Put a handful of salt into a quart of water, add an ounce of spirits of hartshorn and half an ounce of spirits of camphor. Cork the bottle tightly, to prevent the escape of the spirit. Soak a piece of soft cloth with the mixture and apply it to the head ; wet the rag fresh as soon as it gets heated. Soaking the feet in very warm water, in which a spoonful of mustard has been stirred is also beneficial in drawing the blood from the head. Two teaspoonfuls of powdered charcoal well-stirred in a half a glass of water and drank at once, is a valuable remedy in sick headache from sour stomach, flatulence, etc. Tincture of nux vomica is recommended by Ringer as possessed of real curative powers, when given in drop doses, repeated every 5 or 10 minutes, for 8 or 10 doses, and then continued at longer intervals, for sick headache, accompanied with acute gastric catarrh, whether due to error in diet, constipation, or no apparent cause.—*Hosp. Gazette*.

THE DOCTOR'S DREAM.

I am sitting alone, by the surgery fire, with my pipe alight,
now the day is done :
The village is quiet, the wife's asleep, the child is hush'd,
and the clock strikes One !
And I think to myself, as I read the LANCET, and I bless
my life for the peace upstairs,
That the burden's sore for the best of men, but few can
dream what a Doctor bears ;
For here I sit at the close of a day, whilst others have
counted their profit and gain,
And I have tried as much as a man can do, in my humble
manner, to soften pain :
I've warned them all, in a learned way, of careful diet, and
talked of tone.
And when I have preached of regular meals, I've scarcely
had time to swallow my own.
I was waked last night in my first long sleep, when I crawl-
ed to bed from my rounds dead beat.
"Ah, the Doctor's called !" and they turned and snored, as
my trap went rattling down the street !

I sowed my oats, pretty wild they were, in the regular
manner when life was free,
For a Medical Student isn't a Saint, any more than your
orthodox Pharisee !
I suppose I did what others have done, since the whirligig
round of folly began.
And the ignorant pleasures I loved a boy—I have prett
well cursed since I came to be man.

But still I recall through the mist of years and through the portals of memory steal.
The kindly voice of a dear old man who talked to us lads of of the men who heal,
Of the splendid mission in life for those who study the science that comes from God,
Who buckles the armor of Nature on, who bare their breast and who kiss the rod.
So the boy disappeared in the faith of the man, and the oats were sowed, but I never forgot
There were few better things in the world to do than to lose all self in the doctor's lot.

So I left life that had seemed so dear, to earn a crust that isn't so cheap.
And I bought a share of a practice here, to win my way, and to lose my sleep;
To be day and night at the beck and call of men who ail, and women who lie;
To know how often the rascals live, and see with sorrow the dear ones die;
To be laughed to scorn as a man who fails, when Nature pays her terrible debt;
To give a mother her first-born's smile, and leave the eyes of the husband wet;
To face and brave the gossip and stuff that travels about through a country town;
To be thrown in the way of hysterical girls, and live all terrible scandals down;
To study at night in the papers here of new disease and of human ills;
To work like a slave for a weary year, and then to be cursed when I sent my bills!

Upon my honor, we're not too hard on those who cannot afford to pay.
For nothing I've cured the widow and child: for nothing I've watched till the night turned day;
I've earned the prayers of the poor, thank God, and I've born the sneers of the pampered beast,
I've heard confessions and kept them safe as a sacred trust like a righteous priest.
To do my duty I never have sworn, as others must do in this world of woe,
But I've driven away to the bed of pain, through days of rain through nights of snow.

As here I sit and I smoke my pipe, when the day is done and the wife's asleep.
I think of that brother-in-arms who's gone, and utter—well, something loud and deep!
And I read the LANCET and I fling it down, and I fancy I hear in the night that scream
Of a woman who's crying for vengeance! Hark! No, the house is still! It's a Doctors's Dream.—[*Punch*, Jan. 20, 1883.]

SYME'S AMPUTATION.—Dr. S. Savory, in the London Lancet, gives the following in reference to this operation:—

Every one knows that Mr. Syme attached very great importance to certain details of the admirable operation of amputation at the ankle-joint that goes by his name. He insisted especially upon the position of the incision across the sole. "The foot being placed at a right angle to the leg, a line drawn from the centre of one malleolus to that of the other, directly across the sole of the foot, will show the proper extent of the posterior flap. The knife should be entered close up to the fibular

malleolus, and carried to a point on the same level of the opposite side, which will be a little below the tibial malleolus." Thus he laid it down, and he dissected the flap off the os calcis from below upward. These directions were for a long while rigidly observed, but of late years surgeons have been less particular in the direction of the incisions. That across the sole is often made obliquely backward at the expense of the flap. The incision across the front of the joint is also varied, sometimes being quite transverse, at others curved toward the toes. With regard to the heel, of course the more obliquely backward the incision of the sole is made the less difficulty will there be in the reflection of the flap, if done from below upward; but it seems to me of importance to preserve at least the whole of the heel, so that it is best to make the incision a vertical one. The thick integument of this region forms so capital a pad on the extremity of the stump that care should be taken to secure the whole of this, and to bring it well forward in the first instance, for during repair and afterward there is a tendency in this to be drawn backward. Of course, it will not be forgotten that after this operation the person stands and walks directly upon the extremity of the stump. With regard to the particular points where the extremities of the vertical incision should be, some surgeons keep them both on a level with the external malleolus, but prefer to have them rather more forward—that is to say, on a line with the extremity of the internal malleolus, but not extending higher than the level of the external one, for the base of the flap is thereby so much broader. This is, I think, an advantage, and, so far as I can see, there is no objection to it. But of all changes in the operation I should attach most importance to the way in which the dissection is done. I greatly prefer, after making both incisions, to open the joint from the front, and then to work from above downward. This mode of dissecting out the os calcis is far easier than the original plan of dissecting from below upward, and there is less danger of inadvertently cutting into the substance of the flap. I have adopted this plan now for several years, in many cases, and I cannot doubt that it is a much better one of performing the operation. By dissecting out the os calcis from above downward, and so escaping the only difficulty in the operation—that of turning off the heel—there is no temptation, as in the other way, by carrying the first incision obliquely backward, to sacrifice some portion of the flap.

QUESTIONS FOR FINAL EXAMINATION, M.R.C.S. ENG.—The following questions were given at the written portion of the "final" examination for the diploma of member held on the 19th and 20th of January last:

Surgery and Surgical Anatomy.—1. The femur

being fractured in its upper third, just below the trochanter minor, enumerate all the muscles which might displace the upper fragments grouping them according to their actions. Give their origin, and insertions. 2. Mention, in the order in which they occur, beginning at the external surface, the parts divided in the operation of opening the colon in the left loin. Name the structures which serve you as guides, and those to be avoided. 3. What are the causes and signs of suppuration within the antrum? Give the appropriate treatment. 4. Give the usual symptoms of intra-cranial suppuration following an injury to the head. After what class of injuries are such symptoms most common? In what situations may the pus be found. What are the indications for surgical treatment? 5. Give the symptoms, course, and treatment of purulent ophthalmia of infants. 6. What untoward events might occur during the employment of the taxis? How are they to be recognized and met? (Candidates must answer at least four, including one of the first two, of the six questions.)

Principles and Practice of Medicine.—1. What are the symptoms of tubercular meningitis, the conditions under which it occurs, and the means of distinguishing it from the diseases which it most resembles? 2. Describe the symptoms, physical signs, and treatment of aneurism of the arch of the aorta. 3. What are the causes and symptoms of jaundice? 4. Enumerate the official preparations which contain mercury; give the dose of each, and briefly state their chief uses. (Candidates must answer three of the four questions, including question No. 4.)

Midwifery and Diseases of Women.—1. Under what conditions does rupture of the uterus take place? What symptoms and signs indicate its occurrence? 2. State the conditions under which forceps-delivery is called for? 3. You are called to a patient three weeks after delivery, who has a painful fixed swelling occupying the left iliac fossa, with febrile symptoms. What is such a case likely to be? What course is it likely to run? How would you treat it? 4. What are the causes of hæmorrhage from the unimpregnated uterus? (Candidates must answer three of the four questions.)

SULPHUROUS ACID AND IRON IN SCARLATINA MALIGNA.—Dr. Keith Norman Macdonald, after denying the prevalent opinion, that no reliance can be placed on any drug in cases of scarlatina, does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy we possess. He continues, "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that, of all reme-

dial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows:—The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapour through the room, until the atmosphere begins to become unpleasant to breathe. In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark shades which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once, the spray, and permanganate solution will then prove of great service. As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use."—*Brit. Med. Journal.*

THE SALICYLATES AND HÆMORRHAGES IN ENTERIC FEVER.—Dr. James Fergusson, of Perth, writes: "At the time when salicylic acid and its compounds are receiving so much attention, may the following facts be regarded as at least worthy of statement? Last year, while resident in the infirmary here, I had an opportunity of testing the efficacy of certain drugs as antipyretics in enteric fever. These agents were used successively, each over a group of cases, and included the salicylate of soda. The latter had not been long in use when an increased frequency of hæmorrhages from the bowel raised the question, Could the salicylate be favouring the production of that complication

of the malady? Whether it were or not, the suspicion aroused dictated the withdrawal of the salt from use in cases of typhoid. Shortly afterwards, I noticed that a foreign observer had reported the salicylate of bismuth, and, I think, also salicylic acid (though of the latter I cannot be certain, as I am not able now to find the report in question), to cause intestinal and nasal hæmorrhages. The subject would not have been revived by me at present, but for the recent experience of my successor in the resident's office of the above-mentioned institution, Dr. H. McLean Wilson, who joins me in placing the facts before the public. Dr. Wilson in having recourse to the soda-salt in typhoid, found the same striking frequency of hæmorrhages to follow closely. His employment of the agent differed from mine, in that he administered small doses of ten to fifteen grains frequently over the twenty-four hours, while I gave half-drachm doses at longer intervals apart. In the other respect, however, our experiences have been so similar, as to warrant the facts being brought under notice, so that the important practical question involved, may, if possible, be decided by the evidence of a number of observers."—*British Medical Journal*.

TREPHINING FOR INTRA CRANIAL ABSCESS.—Dr. Kilgariff, *Dublin Journal of Medical Science*, January, 1883, exhibited a patient before the Surgical Section of the Academy of Medicine, in Ireland, on whom he had performed the operation of trephining on account of an abscess resulting from a fall in the hunting field. The patient was unconscious for two hours after the accident. At the end of a fortnight he was removed to Dublin, suffering much from pain over the upper part of the occipital bone on the right side, and also much gastric irritability and general debility. Any motion, such as driving, intensified the pain, and caused nausea. On examination a shallow depression, the size of a florin, was found, bound by a well-defined margin, at the situation where he complained of the pain. The diagnosis of fracture, with the subsequent formation of an abscess within the cranium at the seat of the lesion, was made. An exploratory incision was made down to the bone, and a small purulent collection was opened into. Subsequently the operation of trephining was undertaken; and on exploring the bone a small circular opening through the skull, about two lines in diameter, was discovered. Through this opening, situated on the upper part of the occipital bone, some purulent matter oozed. A circular piece of bone was then removed with the trephine to provide free exit of the pus. An abscess cavity, from which almost half an ounce of pus welled up, was opened into. The inner surface of the piece of bone removed was deeply eroded. The cavity of the abscess was washed out with a weak solution of carbolic acid. Subsequently the patient experi-

enced an attack of erysipelas of the head and neck, from which, however, he recovered, and nothing further occurred to interrupt the process of complete recovery of the patient.

PARALDEHYDE: A NEW HYPNOTIC.—The actions of this drug were first studied by Dr. Carvello, of Palermo; and his experiments were made in the laboratory of Experimental Pharmacology at Strasburg, under the direction of Schmiedeberg. Prof. Morselli, of the Royal Asylum of Turin, has, in conjunction with Dr. Bergesis, the assistant medical officer, made an extensive series of observations with it. Its chemical composition is $C_6H_{12}O_3$; and it is a polymeric form of aldehyde. In physiological action it strongly resembles chloral. A dose of three grammes procures quiet and refreshing sleep for from four to seven hours. It differs from chloral in its action on the circulatory system, strengthening the heart's action, while diminishing its frequency. It has also a well-marked action on the kidneys; greatly increasing the flow of urine. The skin is not at all affected. The drug does not give rise to digestive disturbances, to headache, or to any other unpleasant symptom. Up to the present, Professor Morselli has used paraldehyde about three hundred and fifty times. He has found it a valuable remedy in mania, melancholia, and other nervous affections, as well as in the sleeplessness that accompanies acute bronchial catarrh, lobar pneumonia, and heart diseases. He believes that it will to a large extent take the place of chloral.—*British Medical Journal*, February 3, 1883.

PUERPERAL FEVER.—In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowe, on "Puerperal Fever, its treatment and prevention," in which occurs the following judicious expression of views in regard to treatment:

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly-acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contra-indicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless; and yet these remedies have been vaunted and are

actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulpho-carbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience; and I would strongly urge that all depressant remedies are both hurtful and dangerous."

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.—*Am. Med. Digest.*

ABDOMINAL SECTION—208 CASES BETWEEN MARCH 1ST AND DECEMBER 31ST, 1881.—Mr. Lawson Tait, F.R.C.S., Eng., Surgeon to the Birmingham and Midland Hospital for Women, in a paper bearing this title, gives the following analysis of the series:—Exploratory incisions, 13 cases, with no deaths; Incomplete operations, 8 cases, with four deaths. Operations for Cystoma: One Ovary, 36 cases; Both Ovaries, 28; Parovarian Cysts, 12; Hydrosalpinx, 16; Pyosalpinx, 20; or 112 cases, 3 deaths. Removal of Uterine Appendages: for Myoma, 26 cases; for Chronic Ovaritis, 12; for Menstrual Epilepsy, 1; or 39 cases, 5 deaths. Hepatotomy for Hydatids, 2 cases; Hydatids of Peritoneum, 2; Cholecystotomy for Gallstone, 2; Radical of Hernia, 1; Nephrotomy for Hydatids, 1; Nephrectomy, 1; Intestinal Obstruction, 1; Solid Tumors of Ovary, 3; Hysterectomy for Myoma, 10; Cysts of unknown origin, 1; Tumors of Omentum, 1; Pelvic Abscess opened and drained, 7; Chronic Peritonitis, 4; or 35 cases, 4 deaths. Total, 208 cases, with 16 deaths. These operations were not performed under carbolic spray.—*British Medical Journal.*

NOVEL SYSTEM OF BURIAL—Dr. Alexander Mayer has proposed a novel system of burial, which, while obviating the difficulties and prejudices which at present stand in the way of cremation, he claims to possess all the sanitary advantages connected with that ancient method of disposing of the dead. His system is simply to inclose the body in an opaque glass coffin, hermetically sealed, to drive out the air from this receptacle, and to replace it with carbonic acid, or some other gas of antiseptic properties. By these means the body would be preserved as well as if it had been embalmed, and burial could be deferred, if required, for any period.—*Am. Medical Weekly.*

PANCOAST'S COUGH MIXTURE—The following

formula, said to have originated with the late Prof. Pancoast, of Philadelphia, has the advantage of containing no opium or morphine, since many persons cannot take either of these remedies without discomfort.

Wild cherry bark,

Senega.....aa 3 iv.

Ipecacuanha..... 3 ij.

Extract of conium.....gr. xv.

Water.....q. s. ft. (by displacement) fl. 3 viij.

Then add

Gin.....3 i.

Compound tinct. of cardamom.....3i.

Two teaspoonfuls in water constitute the usual dose to relieve cough.—*Med. Bulletin.*

TREATMENT OF GONORRHOEA—A rather large number of American, German, French, and English physicians have—as we see by reading through the many different foreign and domestic medical journals—of late been reporting very successful results in the treatment of gonorrhœa by the *yellow oleum santali*. We learn that the remedy invariably puts an end to the discharge within two days, but to prevent a relapse it has to be continued for two weeks longer. From 15 to 20 drops given three times daily is the usual dose, which may be administered on sugar or in gelatine capsules.—*Med. and Surg. Reporter.*

THERAPEUTIC VALUE OF HYOSCYAMIA—A writer in the London *Lancet* says: "No man who has ever used aconitine for the reduction of temperature will go back to the tincture, Fleming's though it be, or any crude form of the drug; and he who has not used hyoscyamia in troubles of the hollow viscera—stomach, bowels, bladder, etc.—has yet to experience the satisfaction and joy with which he will be greeted after prescribing it for a patient with spasm, retention, dysentery, or hernia; for this last is often spared the surgeon's knife by this beneficent drug."

INCISION OF THE MEMBRANA TYMPANI—In accumulations of mucus or pus in the cavity, writes St. John Roosa, (*Archives of Otology*) paracentesis *carefully and gently performed* is a great addition to our means of cure. It is not, however, to be lightly undertaken: mucus may be removed with a little delay by the Politzer bag, and a red and swollen drum-head may be relieved by leeches or scarification. In performing paracentesis the author uses a small needle, and makes the incision just large enough to give exit to the pus, blood, or mucus.

A BUSY doctor sent in a certificate of death the other day and accidentally signed his name in the space of "Cause for Death." The registrar says he wishes the profession would be as accurate generally.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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The LANCET has the largest circulation of any Medical Journal in Canada.

HIGH-PRESSURE EDUCATION.

This subject, though somewhat threadbare, still presses itself now and then upon the attention of those who have at heart the highest interests and future welfare of the coming generation. The prevalent high pressure-system of our colleges and public schools has been the subject of serious consideration by many of the leading members of the profession, both in the old world and the new. So far however, the warnings so emphatically sounded, the admonitions so wisely proclaimed, and the advice so freely given have not been heeded by the community at large, nor acted upon by the educational authorities. This is greatly to be regretted, and while it is to some extent disheartening and discouraging to those who are gratuitously bestowing much thought and labour upon the subject, yet the duty of the hour makes it incumbent upon those who are best qualified to express an opinion, to continue their efforts. The public do not fully understand the gravity of the question, and therefore cannot be expected to appreciate the value of the advice given. It is our great boast, and it is no idle one either, that we have the best school system in the world, yet it must be acknowledged that under its sanction the high-pressure system has had, and is still having, full sway. Nor is this iniquitous system of cramming confined to our own country. In a copy of the *New York Herald* of recent date will be found a letter from a school-girl on this subject which is particularly suggestive. After enumerating her daily routine of studies, which are "arithmetic, algebra, geography, astro-

nomny, grammar, United States history, general history, etymology, spelling, composition, drawing, reading, writing, and singing by note,"—a formidable list truly, for a girl in her teens—she goes on to say :

"After spending a long, wearisome day in a close school-room, trembling every minute for fear I shall forget some date in history or rule in algebra, I walk home, a distance of three short blocks—the only exercise I have except at lunch time, with a short recess in the forenoon in a crowded school-yard. As soon as I arrive at home I sit down to work out my number of algebra problems, which I would not mind if I was not so nervous and tired. After that comes my spelling, twenty review words of former grades, and twenty, historical, geographical, or astronomical names, which take quite a long time to hunt up in their respective text-books. Then next in the order of exercises is a long history lesson, with such lists of names and dates that it makes my head swim to look at them. I study the civil war, together with the explorations and early settlements. By the time I lay down my book to have supper my head feels as if it would burst. I hastily swallow my food, thinking all the time of how much more I must jam in somehow before I can rest. I hurry through two chapters of geography, and while studying them think, 'O dear, I don't half know that history yet !' and I have got astronomy and an account of Solyman to find in an encyclopædia, history, or elsewhere, besides preparing the definitions of a reading lesson, with the notes about the author. I study and search in histories and text-books until I am about worn out. I do not dislike study, but object to being obliged to work until twelve o'clock every night."

Now we venture to say that the experience of this poor girl is the experience of hundreds of young girls in Canadian schools to-day. Such is not education in the true sense of the word. It cannot lead to the development of a sound mind in a sound body, nor is it to be expected that the mental and physical system at this impressible period of life, can bear up under such a heavy strain. The tendency of the times appears to be to go from one extreme to the other. Surely the pendulum has swung far enough in this direction. Let us have a change, a swinging back again, and to that end the profession has a duty to perform in the premises, which is to continuously and persistently sound the note of warning in the ears of parents and those in authority. This reform, like all other great reforms, is only to be obtained by creating a public sentiment in its favor, and hence the

the great necessity for all who have the best interests of humanity at heart, to persist in the good work until success finally crowns their efforts.

BABY INCUBATORS.

"There were giants in the earth in those days"—and there shall be giants in the earth in these days, to be seen not in side-shows merely, but on every hand—that is, if a report which comes from France be true, and it is well vouched for. And if giant babies are the making of giants and giantesses, all will admit the importance of a good send-off. It is just as essential in raising men and women as it is in raising any kind of stock. "Blood" and scientific management are no less potent in the one case than the other. Indeed, it would be a great blessing to mankind were some of the ideas acted upon by the raisers of good stock, imported into the more important business of raising a superior race of men and women. The working out of the law of the "survival of the fittest" would receive fresh impulse; much sickness, pain and sorrow would be averted, and the sum total of man's happiness would be immeasurably increased. But no such luck is in store for the human race. The weak and the sickly no less than the strong and healthy will continue to produce after their kind. Man's two-fold nature is an insuperable barrier to the enactment of civil laws, restricting to any considerable extent the natural law of reproduction. Economic and social considerations will always outweigh considerations having regard to the welfare of the prospective offspring. All that science or government can do in the matter, is to educate the masses into a more perfect knowledge of physical laws.

But to return to the subject—Dr. Tarnier, a French physician, attached to a foundling hospital, reports surprising results from certain recent experiments. This gentleman is said to have been grieved by the large number of children under his care who perished within the first six months of their life. While in this mood a new idea occurred to him. If French chickens, he asked himself, can be raised by artificial means, why not French babies? He caused a box to be made, having glass sides, and resembling an ordinary chicken-incubator. It was furnished with a soft bed, placed in a dark room,

and kept at a temperature of 85° Fah., by means of hot water. In this baby-incubator he placed one of the infants, a miserable specimen of the crying, colicky kind. The child was provided with a nursing-bottle, and of course only fed at regular intervals. The child ceased its crying on the second day, much to the doctor's surprise, and never again cried for the space of the eight weeks it tenanted the incubator. At the end of this period it had the appearance of a healthy child of a year old. Encouraged by this success, Dr. Tarnier repeated the experiment with like results. He then, with the permission of the hospital authorities, proceeded to construct an incubator capable of receiving 400 children, and in this he placed all the children in the hospital, 360 in number. All except two remained in the incubator six months, when they had to be removed, having outgrown their narrow beds. Were it not that the facts are vouched for by a commission of twelve, who made a report to the Government, the results claimed might be deemed incredible. The average age of the infants when put in the incubator, was eight months and three days, the youngest being twelve hours, and the eldest eleven months. The average weight of the 360 was ten pounds. At the end of six months the average weight was 84 pounds, and all are said to have looked like children eight years old (*i.e.*), as much was accomplished in six months by the incubator as is accomplished in eight years of ordinary life. The infants were not only large but also strong and healthy, and most of them walked within a week of leaving their nests. The results were astonishing, and exceeded Dr. Tarnier's most sanguine expectations. It is now expected that every child's hospital will go into the incubation business, so that we shall probably witness a lively competition in the business of raising giants.

If this child-incubator is a good thing in foundling hospitals, and for hospital babies generally, it ought also to be a good thing in all homes blessed with babies. Doubtless we shall soon witness a new industry started under the fostering care of the National Policy, and presently baby-incubator agents will be as numerous as sewing-machine agents. It would be easy to enlarge on the practical value and suggestiveness of Dr. Tarnier's experiments. First, it is clear the babies were not rocked, yet they enjoyed perpetual repose. This

teaches us that all the fuss and worry of mothers and nurses, so wearing to the constitution, is not only wholly unnecessary but an absolute evil in all its bearings. Instead of being placed in a condition favorable to absolute quiet, our babies are made a sort of family toy to be tossed from one to another as a means of sport. The moment the little creature begins to notice surrounding objects, its powers are excited to the utmost to afford amusement to the family circle. Dr. Tarnier's babies were fed at regular intervals. The home baby is usually fed every time it cries, as though that were a signal of hunger. Most commonly it is a sign of an overloaded stomach.

In conclusion, we may be permitted to say that, the essential conditions to successful baby-raising, are:—1. Absolute quiet, and no unnecessary interference on the part of nurses. 2. Regular and judicious feeding. 3. Uniformity of temperature above that suited to adults. This condition is difficult of attainment in ordinary life, but much may be accomplished by the knowledge that infants require a higher temperature. Even a modified observance of the foregoing conditions would take away much of the worry caused by crying and sleepless babies, and would add greatly to the quiet, health and growth of our children.

PUBLIC HEALTH STATISTICS.

The Dominion Government have very wisely increased the appropriation for the purpose of collecting and utilizing health statistics, the sum of \$20,000, instead of \$10,000 as last year, having been placed in the estimates just brought before the House. It is very desirable that the statistical system recently inaugurated may work satisfactorily, and that it may soon be greatly extended. The success or otherwise of the scheme, will depend largely on the manner in which the returns from the cities are made use of in the central office at Ottawa. In order that the public may become more and more interested through the monthly reports, the returns should be carefully studied, and utilized in a judicious and practical way by one experienced in such work, as is done in connection with similar weekly reports issued and widely circulated in Great Britain, and useful sanitary instruction should be published therewith.

With sanitary statistics the same principle holds good as with other statistics; they are valuable only as a foundation and a guide, and are of no practical value in themselves, only in so far as they are utilized as a guide in sanitary work. It is much to be regretted, that the journal which has been chiefly or almost wholly instrumental in awakening or creating public interest in this country in sanitary work and promoting health legislation, has been allowed to be discontinued. Even foreign medical and other journals, wisely foreseeing the influence for good in the country exercised by the *Sanitary Journal*, have ventured to express a hope that it might be liberally patronized. The *Journal* was not published in the interest of the profession, but was exclusively and exceptionally in the interests of the public and as such, we have always thought it should have received liberal government support. There is no doubt that the most practical way in which the public can be educated in sanitary matters is by means of a regular and well-conducted periodical. We can only express a strong hope, that means may be provided by which such a journal may be published and freely circulated at an early day, as the public health would be greatly promoted thereby, and we are persuaded that in no way could money be more profitably spent.

MEDICAL MEN IN PARLIAMENT.—The following medical gentlemen were elected to the Ontario Legislature at the recent elections:—Drs. McMahon, Dundas; Brereton, E. Durham; McLaughlin, W. Durham; Baxter, Haldimand; Cascaden, W. Elgin; Dowling, S. Renfrew; Widdifield, N. York, and Preston, S. Leeds.

Apropos of this subject the *Can. Med. & Surg. Journal*, for March, 1883, gives a list of medical members of Parliament for the entire Dominion, which may be interesting to our readers.

DOMINION PARLIAMENT—*Senate*: P. Baillargeon, Quebec; A. H. Paquet, St. Cuthbert; C. E. B. DeBoucherville, Quebec; W. J. Almon, Halifax; T. R. McInnes, New Westminster; J. Schultz, Winnipeg; L. Robitaille, New Carlisle, Q. *Commons*—D. Bergin, Cornwall, O.; J. G. Blanchet, Levis, Q.; H. Cameron, Mabou, N. S.; L. L. Desaulniers, Montreal; J. E. A. De St. Georges, Portneuf, Q.; C. F. Ferguson, Kemptville, O.; J. Ferguson, Welland, O.; J. F. Forbes, Liverpool,

N.S.; J. T. Jenkins, Charlottetown, P. E. I.; J. M. Platt, Picton, O.; P. Fortin, Gaspe, Q.; P. E. Grandbois, Riviere du Loup (*en bas*) Q.; C. A. Lesage, St. Claire, Q.; C. E. Hickey, Morrisburg, O.; G. Landerkin, Hanover, O.; P. A. McIntyre, Souris, P. E. I.; G. T. Orton, Fergus, O.; C. J. Rinfret, St. Croix, Q.; J. E. Robertson, Montague, P. E. I.; L. Springer, Hamilton, O.; T. S. Sproule, Markdale, O.; Sir Chas. Tupper, Ottawa; J. H. Wilson, St. Thomas, O.

QUEBEC.—*Lieutenant-Governor*: L. T. Robitaille. *Council*: C. B. de Boucherville, Quebec; J. J. Ross, Quebec. *Assembly*: L. Duhamel, Wright, Q.; E. Laberge, St. Philomene; A. Cameron, Huntingdon; V. P. Lavalee, St. Felix de Valois; I. Fregrau, Stukely; D. Martel, Chambly; H. J. Martin, Carleton; R. Rinfret, Quebec.

NOVA SCOTIA.—*Council*: D. McNeill Parker, Halifax. *Assembly*: C. H. Munro, West River; A. McLennan, Margaree.

PRINCE EDWARD ISLAND.—*Council*: J. Fraser, St. Peter's Bay. *Assembly*: P. McLaren, New Perth; J. A. F. Gillis, Summerside.

NEW BRUNSWICK.—W. J. Lewis, Hillsboro; E. A. Vail, Sussex; C. A. Black, Baie Verte.

MANITOBA.—D. H. Wilson, Nelsonville.

There are in all sixty members of the profession in the Legislatures—thirty in the Dominion House and thirty in the Local Assemblies. On the other hand in the British Parliament there are but four medical men.

PROFESSIONAL TOUTING.—We are pleased to learn that the "Integrity Medical Aid Fund" of the City of Toronto has closed its career in deference to the remonstrances of the profession. Having thus aided in cleaning the Augean Stables at home, we may now turn our attention to some of the professional touters throughout the country. We have received several notices of flagrant cases of this nature, clipped from newspapers and printed on cards, which we have been asked to advertise *gratis* in the LANCET. One of the practitioners to whose "card" attention has been called, after enumerating all the possible titles to which he can lay claim, recommends himself in the following terms:

"I have been many years in the practice of medicine, and have been favorably placed to acquire a thorough knowledge of the prevalent diseases of this country. By kind, considerate and enlightened treatment of the sick, I hope to merit your patronage."

Another physician touts for patronage by publishing a "list of fees" which he has full confidence will meet with public approval. The latter offers his services for 50 cents a visit in the village and 25 cents a mile to go into the country; midwifery cases within two miles \$4. Still another adopts the old method which has been frequently exposed, of having his name inserted in the papers in connection with every trivial accident which occurs in the vicinity to which he may have been summoned. It is almost unnecessary to state that all such touting for patronage is a transgression of the code of medical ethics, and is alike injurious to the reputation of those who indulge in it, and derogatory to the dignity of the profession. All such actions are exceedingly short-sighted, and unwise. No physician was ever known to build up a reputation, or to acquire an extensive *clientele* by these means. Such tactics are a sign of conscious weakness, and want of self-confidence on the part of those who adopt them.

THE RIGHT TO MAKE AUTOPSIES IN HOSPITALS.—We quote the following from the *Medical News*, Philadelphia, of March 17, in reference to this vexed question:—"Last year a case was decided in England which is of special interest to hospital staffs, as it involved the question of the right of a doctor to make an autopsy. A post-mortem examination had been made on the body of a child dying in hospital, but no previous communication was made to the relatives, nor was their consent asked or obtained. The medical man was charged with improper mutilation of the body. The magistrate, after a week's deliberation, ruled that the Anatomy Act did not apply, and that the surgeon would not be liable to indictment unless it could be shown that the examination had been conducted in such a way as to offer indignity to the body. We are not aware that a legal decision has been given in any similar case in this country. It is, however, such an important point, especially in hospitals, that we should be glad to know that our American courts held the same view as the English." Gratuitous services, often very prolonged and requiring great skill, are but poorly requited when the medical man is allowed at least to learn all he can from such a case. Yet we have known the right to be often denied, and hospital authorities are so afraid of criticism, that they not

seldom join with the relatives in refusing to allow such an examination.

RAILWAY MEDICAL TARIFF.—The following items from the tariff of fees drawn up by the medical referee of the Grand Trunk Railway Company, have been sent to us for an expression of opinion: The fees for a day visit are \$1; night visit, \$2; office consultation 50 cents; dressing of wounds, first time, \$1, in the night, \$2; subsequent dressings, 50 cents. The following rates include subsequent treatment. Amputations, finger, \$5; forearm or arm, \$20; foot, \$20; leg, \$25; thigh, \$50. Setting fractures, forearm, \$10; arm \$15; clavicle, \$8; leg, \$25; thigh, \$30. Reducing dislocations, elbow, \$10; shoulder, \$8; ankle, \$8; knee, \$10; thigh, \$20. It is scarcely necessary for us to say that we consider these charges on the whole, very low, and in some cases, ridiculously low. We are very much surprised, that any surgeon would assume the responsibility of the treatment of serious surgical cases, for such paltry fees. But we are told that some of our confreres are eager to secure and retain the position, with this tariff before them. If such is the case, the blame rests with the profession, and although it looks like robbery for a rich corporation to grind down the poor surgeons, yet it is perfectly natural and business-like for the company to secure the services as cheaply as they can. The surgeons have themselves entirely to blame, if the fees are less than they ought to be.

SUMMER COURSES OF LECTURES.—We desire to call attention to the summer course of lectures which has been inaugurated in Trinity Medical College Toronto, commencing on the 1st of May. This, although the first summer course in this institution, promises to be a success, judging from the number of enquiries which have been received by the secretary, Dr. Sheard. The announcement of McGill College summer course will also be found in this issue. This, which is the 8th summer session of McGill College, will commence on the 12th of April and continue 12 weeks.

THE STYLOGRAPHIC PEN.—Few minor inventions have been so readily appreciated and come so quickly into general use as the stylographic pen. None who have used one will ever be contented with any less convenient apparatus for writing, and

in a short time there will be few who have occasion to write much who have not adopted it. Recent improvements in the manufacture of the "Livermore" Stylographic Pen relating to the fastening of the needle and the ease with which it can be cleaned and repaired, have occasioned much comment. These improved and valuable pens may be obtained by addressing Louis E. Dunlap, Manager, Stylographic Pen Co., 290 Washington St. Boston, Mass. Price, plain, \$2; gold-mounted, \$2.50

WINTER DIARRHŒA.—This affection appears to be more than usually prevalent this winter. In fact many physicians have met with it this winter for the first time in many years' practice. An unusually large number of cases have occurred in the United States, as is noted in the health bulletins. The Michigan State Board of Health report, states that "there are many cases of winter cholera which comes on suddenly and is severe." Our Provincial Board of Health also reports the prevalence of diarrhœa in District No. IV., in which it is not only one of the six most prevalent diseases, but amounts to 5 per cent. of all the diseases reported.

ELECTRIC BRUSH BATTERY.—For some years past, parties in the United States have been advertising so-called electric brushes, but it remained for the Am. Electric Brush Co., of Cincinnati to manufacture a genuine electric brush, fitted up with a complete electric battery on the back. This little instrument, which we have examined and tested, is possessed of wonderful power. It may be used in a variety of cases where electricity is deemed advisable. The cell is composed of carbon and zinc and is charged with a solution of bisulphate of mercury. The coil is supplied with a spring armature, regulated by a platinum-pointed screw, and an adjuster to regulate the force of the current. The price of the instrument to physicians is \$4.

KINGSTON MEDICAL COLLEGE.—The following gentlemen have passed the final examination in the Royal College of Physicians and Surgeons, Kingston:—J. F. Kidd, gold medallist; W. G. Anglin, silver medallist; J. Cryan, H. Freehand, T. Moore, and W. Young, with honors; C. C. Clancey, L. T. Davis, W. Hall, D. C. Hickey, G. McGhie, T. A. Page, R. Smith, and A. McMurchy.

R. N. Fraser, and J. E. Sterling were recommended as House Surgeons to the Hospital, and J. Herald and E. Forrester as demonstrators.

IRON IN DIPHTHERIA.—Dr. Tipton, of Selma, Ala., writing with regard to the treatment of this disease in the *Virginia Medical Monthly* (Febr'y) says, "long before a line was ever written on the use of the muriated tincture of iron in the treatment of diphtheria, Dr. Parke, an old and honored practitioner of Richmond, Va., was curing his patients with this agent with a steadiness and certainty that led him to regard it as a specific, so far as any remedy can be." His treatment is as follows: If the mildness of the disease permits, he clears the bowels out well with a purgative; he then gives, even to the youngest child, the following mixture *every hour night and day*:

℞ Tr. Ferri chlor. ʒiij.
Pot. chlor. ʒi.
Syr. acaciæ.
Aquæ. aa ʒij.—M.

SIG.—From a teaspoonful to a tablespoonful according to age. Milk is to be given between the doses, not only to serve as nourishment but also to prevent the iron from upsetting the stomach and bowels. He uses no local treatment at all—in fact denounces it as hurtful where a child resists. The success, he claims, is largely due to the *persistent and unremitting* administration of the remedy *night and day*.

OBITUARY.—The numerous friends of Dr. Henry Croft will regret to hear of his death which took place in Texas on the 21st of February, at the age of 64 years. Dr. Croft was professor of Chemistry in University College, Toronto, for upwards of a quarter of a century, and was for many years the chief chemical expert in this Province. He was superannuated about two years ago, and since then has been living with his son near San Diego, Texas. He died of an affection of the heart.

MICHIGAN SANITARY CONVENTION.—A Sanitary Convention under the auspices of the State Board of Health, will be held in Reed City, Mich., on the 26th and 27th of April. Subjects of interest in connection with sanitary science, and methods relating to the prevention of sickness will be presented at the meeting.

DR. GOODELL'S MIXTURE OF THE FOUR CHLORIDES.—The following is known as Dr. Goodell's mixture of the "four chlorides," which he prescribes as an alterative tonic:—

℞—Hydrarg. Bichlor. gr. j-ij
Liq. arsen. chlor. ʒj
Acidi. Hydrochlor. dil.
Tr Ferri, chlor., aa ʒij
Syr. Zingib. ʒij
Aquæ ad. ʒvj—M.

SIG.—Two teaspoonfuls three times daily in water, after meals.

IODOFORM IN ANAL FISSURE.—Fissure and ulcer of the anus generally resist all medical treatment, and require for their removal incision or dilatation. Dr. Boardman Reid, of Atlantic City, has had good success, however, in the treatment of these intractable affections by means of iodoform. He uses the following ointment:—

℞—Iodoformi. ʒss
Bals. Peru. ʒij
Cosmolini. ʒj—M.

SIG.—Apply three or four times a day after washing the parts.

Dr. Canniff desires very particularly to thank his medical brethren who so kindly and voluntarily supported him in his application for the position of Medical Health Officer for the City of Toronto. He also begs to ask for the cordial co-operation of the profession in the work which they well know is most important, onerous, and may be difficult. It is his intention to carefully avoid infringing upon the rights of all in relation to cases which may be reported as affected with contagious diseases. Any suggestions or information which may be kindly supplied to him will be thankfully received.

THE LATE DR. KOLLMYER.—The following address of condolence was presented to Mrs. Dr. Kollmyer by the students of Bishop's College:

Bishop's College, Montreal.

Dear Madam,—We, the students of medicine of the Medical College of Bishop's University, hereby beg to tender our most sincere condolence to you in your sad bereavement by the decease of your lamented husband, Alexander Kollmyer, M.D. We feel that the loss is not yours alone, but that the city of Montreal has lost a valuable citizen, the profession of medicine has lost one of

its most efficient and devoted members, and we, the students in the College of which he was a Professor, have lost a kind friend, an enthusiastic teacher, and a valuable counsellor. And we pray that the consolations of heaven may sustain you now, and be your abiding comfort.

March 16th, 1883.

(Signed), J. B. Saunders, C. D. Bell, Chas. La-Fontaine, and thirty others, comprising the students in medicine in Bishop's University.

QUEBEC ANATOMY ACT.—The Quebec Government has recently brought in important amendments to the anatomy act which will, it is hoped, put an end to the disgraceful body-snatching which has obtained of late in this Province. Inspectors are to be appointed whose duty it will be to see that all unclaimed bodies in institutions receiving government aid are handed over to the schools, who shall pay ten dollars for each body. The institutions are to notify the inspectors within twenty-four hours after the death of any friendless persons, and claimants must show relationship within the third degree.

NEW SPLINT FOR COLLES' FRACTURE.—Dr. McNaughton, of Erin, Ont., has shown us a splint devised by himself for the treatment of Colles' fracture of the radius which meets the indication better than any splint we have ever seen. It is applied to the anterior surface of the forearm and hand, extending down as low as the palm, and is moulded to fit perfectly the inequalities of the surface. The Dr. has used it for many years with great success in the treatment of this form of fracture.

EUROPEAN TRAVEL.—Persons contemplating a trip to Europe, or any other part of the Globe, either alone or with excursion parties, will find it to their advantage to investigate the numerous facilities offered by Thos Cook & Son, the renowned Excursion Managers, of 261 Broadway, New York. Full particulars of their arrangements will be mailed free, on application, to any one interested.

DIPHTHERIA is again prevalent in the Maritime Provinces. Mr. Joseph F. Bent, of Springfield, Cumberland, N.S., lost three of his children within a few days from this terrible disease.

ASSOCIATION MEETINGS.—The American Medical Association will meet in Cleveland, Ohio, commencing on the 5th of June. The Association of

Am. Medical Editors will take place at the same time and place. The Ontario Medical Association will hold its third annual meeting in Toronto, on the first Wednesday (6th) of June.

ONTARIO MEDICAL COUNCIL ELECTION.—Dr. C. T. Campbell, of London, Ont., has been elected by the Homœopathic representatives in the Council to fill the vacancy caused by the death of Dr. Morden, in accordance with clause ii. section vii. of the Ontario Medical Act.

ONTARIO MEDICAL COUNCIL EXAMINATIONS.—In our last issue an error inadvertently crept into the announcement of the date of the primary examination. The primary will commence in Kingston on the 13th of April at 4 p.m., and not on the 4th as therein stated.

MEDICAL HEALTH OFFICERS.—Dr. W. Canniff has been appointed Medical Health Officer for the City of Toronto at a salary of \$1500.

Dr. Neilson has been appointed Medical Health Officer for Winnipeg, at a salary of \$1,200.

ERRATUM.—In our notice of Dr. Sanborn's medical charts in the February issue of the LANCET we inadvertently gave his address, Rockford. It should have been Rockport, Mass.

BRITISH DIPLOMAS.—Drs. W. H. MacDonald, of Trinity Medical College, and S. R. Rogers, of Toronto, have received the double degree of L.R.C.P. & S., Edin.

PERSONAL.—Dr. Richard Orton, formerly of Morriston, Ont., who has been abroad for upwards of a year, has returned, and commenced practice in Guelph.

Coroner.—P. N. Balcom, M.D., of Aylesford, has been appointed Coroner for the Co. of Kings, N.S.

APPOINTMENTS.—Dr. W. Nelson, formerly of Montreal, has been appointed Port Surgeon of the Pacific Mail S. S. Co. at Panama.

T. W. Mills, M.D., &c., Montreal, has been appointed Demonstrator of Physiology and Histology in McGill College, Montreal.

REMOVAL.—Dr. H. H. Gardner, has removed from West Lynne, Man., to Sanfrancisco.

The death of Dr. L. Ranney of New York, and also of Dr. Benjamin Howard Rand, Prof. Chemistry Jefferson Medical College of Philadelphia, is announced.

Books and Pamphlets.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. A Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by J. Ashhurst, jr., M.D., Prof. of Clinical Surgery University of Pennsylvania; illustrated with chromo-lithographs and wood-cuts, in six vols. Vol. II. New York: W. Wood & Co.; Toronto: Willing & Williamson.

We have already expressed our appreciation of the value of the above-named encyclopædia in our notice of the first volume. The second volume fully bears out the statements then made. It opens with articles upon wounds, burns, abscesses and gangrene, followed by elaborate articles upon the various venereal diseases, and in the latter part of the volume is begun injuries and diseases of the various tissues. We observe an excellent article in this volume on "The effects of cold," by our distinguished confrere Dr. J. A. Grant, of Ottawa, upon which we congratulate him. The work bears evidence of the painstaking care and the thorough and exhaustive research of the various writers on the different subjects assigned them, and reflects no small degree of credit upon American surgery. The illustrations commend themselves both by their artistic excellence, and by their practical value in elucidating the text. The work is well printed, and handsomely bound. It is sold by subscription only.

PERCUSSION OUTLINES.—By E. G. Cutter, M.D., and G. M. Garland, M.D., Assistants in Pathological Anatomy and Clinical Medicine, respectively, in Harvard Medical College. Boston: Houghton, Mifflin & Co. Toronto: Willing & Williamson.

This interesting little work is intended to teach students and beginners in practice, the anatomical position of the viscera in the normal state, and as a guide to the proper methods of detecting abnormal deviations. The authors state that the book is essentially a condensed abstract of the German literature upon this subject, as contributed by Weil, Ferber, Laschka, and Gerhardt, reviewed and confirmed by their own experience in practice

and at the autopsy table. The work is embellished by some most excellent diagrams, giving percussion outlines of different organs.

THE SCIENCE AND PRACTICE OF MEDICINE, by Professor Alonzo R. Palmer, of the University of Michigan, Ann Arbor. G. B. Putnam & Sons, New York, 1882.

This work is one written by a practical man, with the object in view of bringing practical subjects before his readers. While not likely in any way to interfere with the sale of any other modern work on practice of medicine, it will no doubt be highly appreciated by the friends of the author, both amongst the profession and the students who have attended his lectures.

QUIG COMPENDS NO. I.—QUESTIONS ON HUMAN ANATOMY; By Samuel O. L. Potter, M.A., M.D., with sixty-three illustrations. Philadelphia: P. Blakiston, Son & Co. Toronto: Ure & Co.

This little work contains a series of questions and answers, comprising the essential points of the various structures of the body. It is founded on Gray's Anatomy, and contains many useful hints and aids to memory not found in ordinary works.

Births, Marriages and Deaths.

At Picton, on March 4th, the wife of H. A. Evans, M. D., of a daughter.

At St. Thomas, in Nov. last, Dr. Frederick B. Going, aged 72 years.

At Halifax, on the 27th of Feb., A. Moren, M. D., city medical officer, in the 47th year of his age.

At Cape Sable Island, on the 21st Feb., Dr. J. J. Clark, of Barrington, N. S., aged 56 years.

In Montreal, on the 13th ult., Henry Kollmyer, M.D., aged 51 years.

In Pembina, on the 6th ult., W. D. Ross, M.D., formerly of Ottawa.

At Black River, Jamaica, W.I., on Feb. 4, Dr. George E. Gascoigne, formerly of Brockville, Ont., aged 49 years.

**.* The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

ON CREMATION.

BY JOSEPH WORKMAN, M.D., TORONTO.

There is too much truth in the old saying that "one half the world know not how the other half live," and as death is the last scene in the drama of life, it is equally probable that quite as small a proportion are cognizant of the doleful surroundings of this event. It is, however, a gratifying reflection, that in this land, free from the inherited trammels of older nations and the exigencies of dense populations, we are permitted to award to the remains of the departed that right of decent sepulture, which the voice of weeping nature so urgently craves for. But it is not so in all countries. Even within the limits of our own mother land, interments have been witnessed, and must still be witnessed (for landlords have little interest in the disposal of the dead, but much in the permanent retention of their own broad acres), which are truly harrowing to the feelings of all who are constrained to witness them. What would our native born Canadians think, or say, on seeing, on the edges of a re-opened grave, four, six, or eight skulls cast out by the diggers, and some of these even yet not denuded of all the soft parts and the hair? Verily, the writer has seen coffins broken into, in which the grave clothes and binding ribbons came forth almost fresh, the worms having kindly removed the edible textures. Many graveyards have, by indefinite interments in the same spot, been raised three, four, or more feet above the original level of the surface.

This disgraceful disregard of the defunct *bodies* of the people has, for ages, prevailed in so-called civilized countries, wherein millions have been wrung from the tillers of the soil, in reward of

those entrusted with the care of their souls. All this is very bad, and we, who dwell in a different land, free from the crushing tyranny of landlordism, and the unholy exactions of a pampered hierarchy, should thank the good Providence which has cast our lot where such evils are, and, it is to be hoped, ever will be, unknown. Yes, it is very bad, but not in our mother land, with all her faults and imperfections, has the disregard of decent disposal of the dead reached that climax of outrage, which is to be observed in other parts of Europe. Many of us who have, perhaps, regarded with abhorrence or disgust, the introduction of the practice of cremation, might feel inclined to change our views, or mitigate our sentence of condemnation, did we know a little more of the causes which have led to the proposal of this system. At the conference of sanitarians held last year in Geneva, this subject was freely discussed, and although our Provincial representative did not feel called on, or even warranted, to take any part in the discussion, seeing that in America there is as yet abundance of available land for the enlargement of cemeteries, or for the establishment of new ones, his Italian confrères have not only not hesitated to rank him in their list of *contents*, but have also requested from him his annual subscription, which, of course, his Canadian habits of thought and conventional sentiment do not permit him to transmit. So much for innocence getting into foreign company.

This gentleman has placed in our hands several printed documents, received by him from his European sanitary colleagues, and we think, in justice to the illustrious authors, as well as to the readers of the LANCET, we may venture on the reproduction of a few extracts, after careful perusal of which a considerable change of sentiment, in the minds of the latter, may be experienced. We select for our purpose, a short pamphlet entitled, "Il camposanto Vecchio a Napoli," that is, the old holy-field at Naples,—the equivalent of our old English title of "God's acre." The writer seems to have been a Florentine, who in 1878 was addressing a friend at home. Having made his way into this old place of sepulture (not in fact graveyard, for such, as we understand the word, it certainly was not), he entered into conversation with the caretaker, when the following information was obtained.

"Pardon me, custodian, what are those large

round stones I see on the pavement, all numbered with the chisel?" "Sepultures, Signore," he replied. "There are in all 365, exactly as many as the days of the year, 360 are here, as you see, and 5 others are in the church. At half-past six in the evening, one is opened each day, and, with that machine down there, the dead that have arrived in the day and those who are brought through the night, are buried. It is closed at half-past six in the morning; but if it would please you to see how we do it, amuse yourself in the meantime, and come again towards seven, that you may be *diverted*."

After parting from the custodian, the visitor wandered around, and among other sights he met with the following. "Two old men, with heads bare, under a scorching sun, ran through the various parts, up and down along the lines of sepultures, reciting psalms in a low voice, and every now and again making lamentation, at one time striking their breasts, and again making the sign of the cross, and next spreading out their arms, and raising their eyes to heaven. Near a stone, at a little distance from me, was a group, consisting of an adult woman, a girl and three children; the woman was certainly the mother; she was praying and weeping at intervals, in broken silence. I would willingly have asked these sorrowers some questions, but I refrained from disturbing the mournful assemblage. The mother was kneeling, with her head resting on the shoulder of her eldest daughter, who was sitting beside her; the eldest of the three children joined in the prayer, and wept; the second was sleeping, with his head between the knees of his sister, and the third was playing with a lizard which was tied by the tail. In one corner two ragged fellows were sleeping and snoring sweetly; in another a lot of rogues were clamoring and jesting, and throwing stones into the air. . . .

Whilst I was silently observing these things, a man without a shirt made his appearance at the gate, with breeches half down his legs; he was carrying something on his head, which at a distance I could not recognize. He entered singing, with one hand on his hip and the other on the object he was bringing on his head. He was as nimble and elegant as a Pompeian figure. He advanced some paces, and after looking around he called out, 'Treonce,' one of the assistants who was sleeping in a corner; he jumped up and ran to meet him, and so did I. The thing which the newly arrived

held on his head, was a little coffin of the dead. Whilst the custodian was preparing the metal casket of deposit, the two assistants undid the lid of the little coffin and exposed the emaciated body of a child of about two years. It was enveloped in a few rags, but a poor garland of green twigs surrounded the slender corpse, and a May rose was seen hanging from its mouth. The thought of the hand which had placed that rose there, came over me, and I felt a choking, whilst the children, sporting down below were running about tickling each other, and smiling and cheery were skipping around. The casket of deposit was prepared in a moment, and the little cadaver was laid hold of by one assistant by a leg, and was tossed into it. The garland flew one way and the rose another, and two streaks of blood ran from the nostrils over the cheeks of the miserable creature. The ragged fellows, between them, made away with the garland and the rose, and the industrious Treonce having, in the meantime, at the sound of some footsteps, finished the breaking up of the coffin, went off with the pieces under his arm, whistling cheerily the air of *Palumbella*.

"In like manner I saw other cases (coffins?) with the bodies of adults arrive, either on vehicles, or carried by hands, or on the roofs of carriages, and to all that I saw nearly the same treatment was given. From one corpse, that of an old woman, I saw, while it was being lifted, the only bit of cloth which covered the abdomen, fall off, and it was left stark naked under the eyes of the staring crowd; in another instance, that of an old man, who slipped from the hands of him who was raising the body by the shoulders, I saw the head slap down on the pavement, with that sinister thump which is never forgotten, and can never be mistaken for any other sound. But it is nothing at all; the satraps of Naples are at dinner; and this little sound will certainly not reach them, nor derange their placid digestion."

The visitor returned on the second evening after, in order to witness the established system of Neapolitan sepulture. Here are some of the sights witnessed by him:—"There are some impressions which cannot be recounted, and we can only think, and be silent, for language is insufficient. The aged priest recited the prayer for the dead; he blessed the bodies, and withdrew, giving a signal to the men of the service, which set them quickly

to work. 'To it,' cried one of them, and in an instant the capping-stone of the huge charnel-house was raised. An escaping volume of sickening stench in a moment drove back the hundred faces of the curious who were standing over it, but another hundred, urged forward by stupid curiosity, fear, and horror, took their places over the fetid opening. The ragged fellows who stood apart, called loudly, opening a passage for themselves through the crowd, which remained closely locked and screaming, feeling themselves suffocated; and in this time the men placed at the machine did not cease to salute one another, calling out, 'Back there! pitch it in! forward, forward, let us finish.' It was necessary to allow a full quarter of an hour to give vent to the beastly curiosity of the crowd, and the dismal operation again proceeded. The wretched machine turned creaking on its wheels, and the metallic casket, suspended by its chains, was brought into horizontal position on the ground. At this time I went to the gloomy opening, and running my eyes around, I saw beneath, a formless mass of whitening bones and musty clothes. Horror drove me back. The first body taken off the bier was quickly placed in the metal casket, which, under the force of the winch and crane, was raised a little above the surface, and then let slowly down into the pit. The crowd again bent over it to see the descent, when at a certain point a spring was loosed, the bottom of the casket opened, and the first human carcase went down with a thud, to take its place in the great dung-pit assigned to it for its last abode. The casket came up again, and this time it fell to the lot of a young man to present the sad spectacle. Two attendants, the one laying hold of the body by the legs, and the other by the axillæ, placed it in the casket of the machine. The aspect of the corpse, that of a young man, who was now to make the mournful descent, had impressed even the most stupid present. All were breathless, and in the general silence the crane gave out its grating sound. A smothered cry reached my ears, and I saw presenting herself, weeping and approaching the opening, into which the body was descending, a young woman who, a little before, had arrested my attention. Two friends ran after her and seized her by her dress, lest she might throw herself into the gloomy cistern, but she halted and stooped over its edge with glazed eyes, until the body struck the bottom,—she then sank

down, as if it had fallen on her heart, and she gave herself over into the arms of her companions. I turned round to an old man who was near, looking on, and said, 'Do you know her?' 'Robba de lupenare. eccellenza,*' was his reply. 'Enough,' said I. A deep murmur of compassion and fear arose over the scene, and some of us moved out to assist the unhappy one, but we were not in time, for tottering, and throwing her arms convulsively in the air, she disappeared as a phantom, under the light of the lamp which illumined the entrance, borne onward by her companions."

The pamphlet above quoted from, gives the number of the dead thrown into the 360 pits annually, as 7,000, which would give an average of nearly 20 bodies yearly to each. After a year of closure the capping-stone is again raised, and a new supply is cast in. Who will assert that cremation here would not be both a more decent and a more affectionate disposal of the dead?

ON SPASM OF THE GLOTTIS.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.

It is easy to show, from the facts of recent physiology, that the opinions currently taught and received on this subject, are entirely erroneous and misleading. The opinion, in chief, to which exception is here taken, is that the spasm in question is due to an over excitation of the nerves supplying the muscles of the glottis.

The aperture of the glottis is regulated by two opposing sets of muscles, one of which tends to widen, and the other to close it. Both groups of muscles derive their motor nervous supply exclusively from the inferior laryngeal, or recurrent nerve, which is a branch of the pneumogastric. When the latter, or the recurrent branches, are cut on both sides of the neck, the glottis closes, and this closure, as Dr. Burdon Sanderson shews, is due not to paralysis of the dilating muscles, but to the fact that these are overpowered by the superior force of the constricting muscles. "The combined effect" of the activity of all the muscles concerned "manifesting itself in approximation of the vocal cords," and closure of the glottis.—(Hand-book for Phys. Labor, Amer Ed. pp. 308-318).

* 'Robba de lupenare,' means a woman of the town; but what a history may not that of this mourner have been!

This is a very important fact, both theoretically and practically, and is fully corroborated. Guttman, in his "Physical Diagnosis," mentions the same fact in stating that "section of the recurrent nerve in animals produces narrowing of the glottis." (p. 40.) Dr. Austin Flint, discussing the "danger of death from suffocation," in the "obstructed inspiration," occurring in nervous aphonia, says, "the condition is analogous to that after the physiological experiment of dividing both recurrent laryngeal nerves." (Prac. of Med. 5th Ed., p. 309.) The same author has "reported a case in which the left recurrent nerve being situated between a calcareous deposit and an aneurismal tumor, spasm of the glottis occurred so frequently and to such an extent as to prove fatal." (*Id.* p. 371).

Now, in such a case as this, as well as in that of section of the nerve in the physiological experiment, the active condition of the muscles (which, as we have seen, results in closure of the glottis,) must be associated with a paralytic condition of the nerve. This will hardly be questioned, from the very nature of the case; for it is impossible to see how the divided nerve could be the medium for the transmission from the nerve to the muscles of what Dr. Pereira calls "a preternatural stimulus," forcing the muscles into spasm. Besides, Dr. Burdon Sanderson, in his account of the experiment, writes, that "the glottis is partially closed, *just as it is after death.*" (Loc. cit. p. 318). (*Italics mine.*) Further on we read:—"In animals with divided vagi, life is prolonged by tracheotomy," showing that the closure here referred to as "partial," must in reality be so nearly complete, as at all events to produce a fatal result if not obviated by special intervention. How closely drawn is the glossal aperture "in death," will appear from the well-known difficulty of passing a probang within the larynx of the cadaver, on the feasibility of which Dr. Flint throws serious doubts. (Loc. Cit. p. 294.) If it be true, then, that section of the nerve, or the pressure on it of a tumor, results in a condition of the glottis similar to what is present in death, it is a legitimate conclusion that in one case as in the other, nerve action has ceased to be operative as regards the muscle, that in short, the condition is one of nervous paralysis.

This fact is of prime importance to the general practitioner, in the treatment of spasm of the glottis, whether in the case of simple spasm (laryngismus

stridulous) or in the onset of true membranous croup, which is accompanied by recurring spasms of the glottal muscles, often greatly accelerating the fatal issue. It also throws some light on the general failure of what has been known as "antiphlogistic measures," in the latter disease, which Dr. Flint says, "have been employed sufficiently to show that they are not successful, and if they do not do good, they can hardly fail to do harm." (*Id.* p. 299). It must be obvious that in an abnormal condition of the glottal muscles, depending essentially (so far as the spasm is concerned) on paralysis of the motor nerves supplying these muscles, agents which tend still further to lower nervous activity, can hardly be expected to prove beneficial. Here the results of physiological experiment and an enlightened experience are eminently in accord.

The foregoing facts appear to me to prove as clearly as anything in physiology can be proven, that spasm of the muscles of the glottis closing that aperture results from:

- (a.) Section of the motor nerves supplying those muscles.
- (b.) Pressure on those nerves arresting their functional activity.

(c.) General paralysis on the death of the body. Suppose now, that a precisely similar spasm of the glottis were shewn to attend the application of a powerful agent—a purely physical force—to the motor nerves of the muscles referred to, would not the legitimate inference be, that the action of such agent was of a paralyzing character also? Would it not be regarded as an outrage on physiological propriety to class as a nervous stimulant or excitant, an agent producing effects indistinguishable from those of nerve section, paralysis and death! Such an agent is electricity; and it is here said to play the *role* of an excitant. "During excitation" of one recurrent nerve, "the vocal cord of the same side approaches the middle line. If both recurrences are excited, the rima is completely closed." (Hand-book, etc., p. 308). Of course it is obvious why electricity came to be called an excitant to nerve action. Appearances seemed to justify it. But appearances are eminently deceptive; and it is expected of a true physiology that it will be able to distinguish the real from the apparent.

It is also authoritatively alleged, that after sec-

tion of the vagi, "the muscular fibres of the œsophagus are paralyzed," (Ib., p. 318), and the same is repeated in all our physiological treatises. This is not the place to enter into a refutation of this fallacy. Suffice it to say, that a muscular tube which, as Dr. Dalton states, is able to eject its contents "by a peculiar kind of regurgitation," is by no means in a state of muscular paralysis; and that its active condition is further vouched for by the observation of Marshall Hall, who found it to display "a distinct peristaltic movement along the tube, after its nerves have been divided, causing it to discharge its contents when cut across." (Dr. W. B. Carpenter, Phys. p. 404.)

Finally, the records of physiology furnish ample evidence, though strangely overlooked, that what has been shewn above to be true of the muscles of the glottis, is equally true of involuntary muscles generally, including the muscular bands of the arterial coats, which invariably contract and empty these vessels into the corresponding veins, on section of their controlling nerves, or on destruction of the cerebro-spinal centres, as in the operation of "pithing."

I am aware that this statement is in flagrant antagonism to the authoritative teaching of the day, and that Dr. Burdon Sanderson enters into the details of experiments to prove that under the conditions just mentioned, "all the arteries are relaxed." (Loc. Cit. pp. 245, 296.) But the very facts he furnishes refute his thesis. For instance, when the heart of the pithed frog is laid open, "only a few drops of blood escape,—the quantity, that is to say, previously contained in the heart and in the beginning of the arterial system," while in the frog whose nervous system is intact, "the bleeding is not only more abundant, but continues for several minutes after section" (p. 296). That is to say, in the pithed frog the arterial system is as empty as its physical structure will permit it to be, and "the whole mass of blood comes to rest out of reach of the influence of the heart" (p. 246), having found a lodgment in the more capacious venous system; while in the frog whose nervous system is intact, the arterial system retains its blood, and yields it up "more abundantly," and continues to do so "for several minutes," till the arteries are emptied. Besides, the operation of pithing is easily performed, and any one can satisfy himself, as I have done, by actual experiment,

in the cases of puppies, kittens, rats and frogs, that the arterial system, so far from being "relaxed" or "dilated," is empty and collapsed, and that it is the venous system which is expanded and engorged.

Indeed, Dr. Burdon Sanderson furnishes absolute proof of this himself, in the case of the splanchnics, though he strangely ignores it. The splanchnics, he tells us, contain the vaso-motor nerves which are distributed to the *arteries* of the abdominal viscera, and which regulate the calibre of these tubes (p. 258). After section of these nerves, these arteries are emptied, and "the portal system is filled." In his own words, "a quantity of blood is, so to speak, transferred into the portal system, and thereby as completely discharged from the systemic circulation as if a great internal hemorrhage had taken place" (p. 260).

These facts are produced here to show that the muscles which control the aperture of the glottis are not alone, or exceptional, in passing into a state of contraction when deprived of nerve influence. There is distinct proof that the same is true also of the muscles of the œsophageal and arterial walls, of the muscular bands of the bronchi and alimentary tube, and indeed of muscles of the involuntary class generally, producing characteristic effects in the organs with which they are associated. As already stated, the fact is of the first importance, not only theoretically but practically, and will some day receive the attention it merits at the hands of the profession.

THERAPEUTICS OF OPIUM ADDICTION.

BY J. B. MATTISON, M.D., BROOKLYN, N.Y.

That the continued use of opium, in any form, from whatever cause, will, in time, beget a well marked functional disorder, is a fact which no properly informed physician can fail to accept; and that this disorder, under ordinary professional regime, is one difficult, and often impossible, to treat with success, is another fact which any one who has had experience in this direction, will, very likely, not dispute. Under special supervision, however, this difficulty disappears, and, granting cases suitable for treatment, the disease proves promptly and easily curable, as the following notes will tend to attest. * * *

The therapeutics of these cases include bromide of sodium, hot baths, electricity—both galvanic and faradic current, atropia, strychnia, hyoscyamia, quinia, chloral, coca, cannabis indica, Jamaica dogwood, varied tonics, full feeding, and cheerful surroundings. To note these in detail requires some preliminary reference to the morbid condition they are intended to relieve. The symptomatology of opium abandonment, in our opinion, relates to an exalted activity of the spinal cord manifested in varied reflex irritations. To this are attributable the aches, pains, vomiting, purging, collapse and horrible discomfort, in general, which follow entire and abrupt withdrawal of a long accustomed opiate. If this be correct, it is also correct to assert that any drug able to control this over-action must prove potent for good in treatment. Such we have in the bromides. Their power to subdue reflex irritation is known to all, and in no disorder is this more happily proven than in the one to which we refer. A special and *original* application of this power is what we term *preliminary sedation*, which consists in the giving of the bromide for a time *prior* to entire opiate withdrawal—meanwhile gradually reducing the accustomed narcotic—so that at the time of maximum spinal irritation we have maximum bromide sedation, and the one counteracts and controls the other. We use, exclusively, bromide of sodium. It has two leading advantages. Saving bromide of lithium, it contains the largest proportion of bromine, which is the active factor, and it is less unpleasant than any other, never, in our experience, causing gastric trouble. Minor points in its favor are, lessened tendency to digestive and muscular impairment, and cutaneous irritation. We use it in full doses—60 grains, increased to 100 or 120—in eight ounces of water, twice daily, at twelve hour intervals, and continue it from five to ten days, or even longer—average time one week—the extent of its giving, both amount and duration, depending entirely on the peculiarities of each case, before and during treatment.

Hot baths, 110° to 112°, are the most efficient agent at command to relieve and remove the peculiar restlessness which is an *invariable* sequel of opiate abandonment. They are given as often as required, ten to twenty minutes duration. Their efficacy is sometimes enhanced by a short douche or shower. Electricity is used as a tonic and seda-

tive. The galvanic current we often employ from the outset, and, after abandonment, find it useful as a general restorative and remover of local pains. For the muscular debility following withdrawal, nothing, in our experience, equals general faradization—10 to 20 minute seances daily. The sense of exhilarating comfort resulting is often very decided. Occasionally it is used twice daily, and, very exceptionally, it is not at all acceptable.

Atropia is used in initial doses of $\frac{1}{10}$ gr., hypodermically *ter dié*—or its equivalent by the mouth—and pushed until it produces systemic effects—dry throat and disturbed vision. This has never required a dose exceeding $\frac{1}{4}$ of a grain. Strychnia is given in subcutaneous doses of $\frac{1}{30}$ of a gr., thrice daily, and continued, in some form, throughout treatment. Hyoscyamia, in our experience, has proven itself the nearest approach to morphia of any alkaloid yet presented. We use Merck's *amorphous*, in the dose of $\frac{1}{4}$ gr. hypodermically, and have known it, repeatedly, to produce steady sleep of several hours' duration. Quinia is used for a two-fold purpose—tonic and sedative. As the former, in two grain doses, three or four times daily, throughout treatment. As a sedative, in 20 gr. doses, given a few hours in advance of the restlessness following withdrawal, and repeated at 12 or 24 hour intervals, as required. Thermometric observation proves its power to control the rise in temperature noted after opiate abandonment. Subsequently, it is sometimes given as a soporific, and its efficacy in this respect is, to us, beyond dispute.

During the first three or four days after opiate discontinuance, chloral fails of its usual effect and we never employ it. We have not noted the excitement, stated by Levenstein, but, simply, that it does not induce sleep. Subsequently, as a hypnotic, it answers every purpose, and is given—usually combined with a bromide or hyoscyamus—as long as may be required. We use Squibb's make, in decided doses, our experience being that a single full dose is preferable to one small and frequently repeated. When unacceptable to the stomach it is often kindly received, per rectum, same dose as by mouth, in an ounce or half ounce of warm mucilage. Coca, though far from being what some theoretical enthusiasts have claimed, is a stimulant of value, and as such fills a place in treatment. We use Squibb's extract, in half ounce doses, frequently

repeated after the opiate withdrawal. Cannabis indica, in some respects, is an efficient substitute for opium. It relieves pain and brings sleep, though often causing a mild, harmless intoxication. After a trial of various preparations, foreign and domestic, we prefer the fluid extract made by Squibb. It must be given in large doses, the ordinary dose of the books being of no avail whatever. Jamaica dogwood is a somewhat uncertain anodyne and soporific, yet worthy of trial to remove the neuralgic sequelæ of opium addiction. We give it in full oz. doses. Varied tonics include iron, arsenic, digitalis, and cod liver oil. The first two if anemic. Digitalis after the sedative treatment, as a tonic and also diuretic, to eliminate the bromine. Cod liver oil is a particularly valuable roborant, possessed of special nutrient properties to repair the wear and tear of prolonged narcotic addiction. We prefer Moller's plain oil and Phillips' emulsion.

During the first two days of opium abstinence, patients are best restricted to a diet of milk and lime water, in small amounts, often repeated. After that full, feeding is allowed and encouraged to the largest extent consistent with gastric comfort. Cheerful surroundings are a valued adjunct in treatment. No restraint is imposed upon patients, and they are permitted to indulge in walks, rides, drives and amusements freely as possible. The practice of subjecting them to a rigorous search on admission, and regarding them as prisoners under strict surveillance during the period of active treatment, we do not approve. No one of a fine sensitive nature can rest under this constant suspicion without a sense of resentment, which cannot be other than prejudicial to the cordial relation which should ever exist between physician and patient. We ask for and extend confidence, and believe we largely enhance a good result in so doing. Nor do we share in the opinion, largely held, that no reliance is to be placed on the word of opium habitues. While admitting that the greatest liar we ever knew belonged to this class, this admission affords no support whatever to the assertion that they *all* are liars. That the habitual use of opium, in many cases, does exert a baneful influence on the moral nature, we are fully aware, but we also know that in the ranks of these unfortunates are those who would scorn to deceive, and whose statements are as worthy of credence as those upon whom has

not fallen this blight. Under the plan of treatment we pursue, the temptation to secret taking is small. Patients are allowed a sufficient amount of the accustomed opiate during the sedative regime to obviate any great discomfort. Besides, we have at command, *infallible* means for determining clandestine indulgence, both before and after the opiate withdrawal. Two pre-requisites are essential—freedom from organic disease, and an earnest desire of the patient to recover. Granting these, excess of taking—time or quantity—offers no bar to success.

Before closing, we cannot refrain from inviting attention to this method of treatment as compared with that of peremptory abandonment or prolonged decrease, offering, as it does, a more or less happy medium between these two extremes. If our statement as to its merit be true—and we challenge proof to the contrary—then we make bold to assert that no physician is warranted, save under circumstances peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal. We are well aware that it has the sanction of men otherwise eminent in the profession; but, we venture to suggest, with no lack of respect to these gentlemen, that, like a somewhat famous nautical individual, "they mean well; but they don't *know*." Theory is one thing—practice another, and we are quite certain were *they* compelled to undergo the trial, there would be a rapid and radical change of opinion. We regard it as cruel, barbarous—*utterly unworthy a healing art*. Gradual decrease has its advocates, and sometimes its advantages. It is the plan pursued by the charlatans who find in the peculiar, secretive character of this disorder a fertile field. It is a mistake to assert, as does Howe, that "tapering off will not effect a cure." It often succeeds, but oftener fails, unless under close and constant professional observation. Its great disadvantage is, that prolonged decrease tries the patience to such an extent that it is sooner or later abandoned, patient lacking both time and inclination for its continuance.

ERRORS IN HYGIENE.—FEMALE CLOTHING.

BY T. ARNOLD HAULTAIN, M.A., PETERBORO', ONT.

"Scarcely a more complete proof can be found of the tyranny of fashion, or the unconscious slavery to which it can reduce the best intellects

"and sincerest characters, than is supplied by the fact of the comparative silence of the medical profession on this subject; silence to which one must think no small blame will attach if ever the world becomes wiser. Members of the medical profession know very well how much nature is outraged, and how she avenges herself." "They might draw attention to the hidden ugliness and scars which good taste will not allow others to hint at. But they know how much more of still greater importance is involved."

This is one of the many vigorous utterances of an admirably practical article in a recent number of the *Nineteenth Century*, by Mr. G. F. Watts, R.A. (1) Nor does Mr. Watts confine himself by any means to artistic deficiencies of costume such as we might expect from a Royal Academician, but truculently inveighs against all articles of dress that violate true hygienic principles.

To his censures on the medical profession, however, we can legitimately and strongly object. Mr. Watts has totally overlooked the fact that there are many institutions in England for promoting the use of hygienic wearing apparel. (2) From casual reading I could name two societies for preserving the natural form of women; besides these, the National Health Society takes this subject into consideration; so does the Ladies' Dress Association; so does the Rational Dress Society, whose tenets were so well advocated not many days ago by Dr. Richardson; and many will remember how wonderfully Mr. Treves' lectures at Kensington interested the highest and most intelligent classes, and how these were followed by an exhibition of clothing under the management of (I believe) the daughter of one of our greatest biologists—Miss Ray Lankester. This last fact shows us how we may more than plausibly trace the source of all these efforts—of which I have mentioned, but a minute quota—to the medical profession. Still Mr. Watts has thrown down a challenge which cannot be disregarded, more especially as it is as undoubted as it is lamentable a fact that the really vicious practices of the fashionable *modiste* are still very rife.

The hackneyed deprecation of high heels, pointed shoes, small gloves, crinoline and tight-lacing we

may safely leave to irresponsible *literati*; it is to the issues "of still greater importance" that are involved that I wish to call attention, and more particularly to that unequal distribution of temperature in the body which is due to defective or unnatural methods of dressing.

If an analysis of a woman's articles of clothing is made, it will be found that the preponderance of material is massed about the region enclosing the organs of generation,—a plan directly discordant with that of nature. Let us first examine nature's method of protection. Writing towards the close of one of the severest winters Canada has for many years experienced, at a time consequently when the hairy and furry coats of animals would be naturally highly developed, I have at hand a horse, a cow, two dogs, a cat and a squirrel. What do I perceive? In the dogs a remarkable sparsity of hair along the inner aspect of the thighs and up the abdomen in the shape of an isosceles triangle, the apex of which is represented by the xiphoid appendix. In the cat a similar sparse growth of fur, and although the individual hairs are somewhat longer than in other parts of the body, yet there is a scarcity of that shorter under-growth which is the true heat-retainer. In the horse and cow the conditions are precisely the same. The squirrel I cannot equally closely observe; yet judging from the different color of the fur about the perineal, interior femoral, and abdominal regions (resembling the thin growth on its ears), compared with the undoubtedly thick coat on all the lateral and posterior aspects of its trunk and limbs, I cannot but conclude that here too the same conditions obtain. The fact is, the intra-parietal structures are sufficient to preserve for the internal generative apparatus the proper degree of temperature.

Now, turning to modern fashions, what do we find? The waist constricted till the circulation in the cutaneous veins, at all events, is impeded; a prolongation of the stays over the abdomen, far below the umbilicus; an accumulation of garments consisting of the lower parts of those that are slung from the shoulders, and the upper parts of those suspended from the hips; many of these imperious to moisture, (3) and an aggregation of folds most conducive to the retainment of heat.

(1) "On Taste in Dress," by G. F. Watts, R.A., *Nineteenth Century*, January, 1883.

(2) "Women cannot complain in these days that sufficient interest is not manifested in all that concerns their welfare," writes an important daily paper.—(*Standard*, Feb. 8th).

(3) Some corsets (e.g., "Wardropp's semi-belted cuirass corset") actually have a metal plate inserted into the lower portion of the abdominal part.

Let us make, mentally, a transverse section of female apparel in the hypogastric region. 1st. The jersey or under-vest,—perhaps two; 2nd, the chemise; 3rd, the stays; 4th, the drawers; 5th and 6th, the petticoats; 7th, the skirt; 8th, either the lower part of the basque, or the polonaise; 9th, either the apron, or, if she is out of doors, the jacket or dolman; and often, 10th, the carriage robe. This computation is at the lowest figure, for often there is a quilted petticoat, than which no possibly better constructed non-conductor could be imagined; and probably oftener still the corsets are “softly padded,” imparting “more or less fullness to figures wanting the roundness,” etc. To enhance the evil, this heap of matter is not gradually increased or lessened, but extreme frigid and torrid zones succeed each other suddenly and arbitrarily. First, the open neck and shoulders; then the “padded bust”; then the comparatively lightly clothed waist; (4) then these nine or ten thicknesses, followed by a flowing skirt and perhaps open-worked stockings.

An eminent French physician once said that sofas and arm-chairs brought him in thousands of francs a year; many a modern gynæcologist could trace as many dollars to this state of things. What is to be done? The answer to this question lies, in the opinion of many, without the range of the duties of the medical practitioner, and with reason. But what certainly does come within his scope, is to show, on scientific principles, where lie the violations of the rules of health and to combat any arguments that may be raised in their defence. (5) If we can once thoroughly persuade mothers to see the evils with which the prevailing fashions are pregnant, we may trust the remedies to their own good sense and acute inventive genius.

DANGERS OF ERGOT IN LOCOMOTOR ATAXIA.

BY PROFESSOR J. GRASSETT, OF MONTPELIER.

(Translated by W. GRAHAM, M.D., Brussels, Ont.).

For some time Ergot of rye has been frequently prescribed in the treatment of Locomotor Ataxia.

(4) It may not be generally known that the part of the skirt, etc., that goes round the waist is usually made of different and thinner cloth; for example, calico.

(5) I may here remark that the idea that corsets are necessary (to sustain the *mamma*, I presume), is by no means valid; for that purpose the *fascia pectoralis* of the Romans or the *strôphion* of the Greeks would be sufficient.

I do not deny that in some cases it is able to produce good results, and I certainly do not wish to take it from the therapeutics of *tabes dorsalis*, already so uncertain and poorly supplied with remedies. Nevertheless, I believe it is of importance to make known a fact which has come under my observation recently, and which proves that in certain cases of ataxia ergot is able to do more harm than good; that in all cases the prescription of this remedy ought always to be surrounded by great precaution, and that the effects ought to be watched, in order to arrest any evil results, should they present themselves. This clinical fact appears to me to be especially interesting at this time, when the observations of Tuczek (to which I shall revert farther on) appear to show that sometimes ergot, instead of curing, may produce sclerosis of the posterior columns.

I give herewith a brief history of a patient that Dr. Privat wished me to examine on the 11th of September last. M. S., of Marseilles, æt. 38, widower without children. His father was rheumatic. He had no history of syphilis, but confessed to venereal excesses. Four years ago he had rheumatic-like pains and headaches, which continued for two years, then suddenly became paralyzed in the third pair on the right side, with diplopia and vertigo. Two or three months afterward there appeared inco-ordination of locomotion, slight lightning pains in the limbs, but very acute ones in the rectum and perineum. In 1880, his first season at Milon, the disease was well marked (trouble with the sphincters, diminution of sensibility in the lower extremities, inco-ordination), etc. In 1881, the second season, there was great improvement; the action of the sphincters was nearly normal and he could walk pretty well. At the end of winter he felt more fatigued and dull. However, this condition improved and he went to Paris to consult M. Charcot, who had formerly attended him. He prescribed ergot, 25 centig. at first, increasing it afterwards daily by 5 centig., up to a gram. He ordered him to continue 1 gram. a day for three days, then cease and take in its place nitrate of silver. The patient returned to Marseilles and followed the treatment without medical supervision. He took the ergot, and on the second day he was taking the dose of 1 gram. he was attacked with paralysis of the extremities and aphonia. He was not able to move. Sensi-

bility was very dull in the paralyzed members, even in the upper extremities, which had always been absolutely intact hitherto. He did not suffer in any part, but was unable to move; he was not able to raise himself up or remain sitting; he was absolutely powerless. He stopped the ergot immediately, and a gradual diminution of the symptoms took place. At the time we examined him, the arms were nearly recovered; he was able to write, the voice had entirely returned, he could sit up in bed, had some difficulty with his urine, rectum normal, inco-ordination in the movements of lower extremities, especially when the eyes are closed, slight drooping of the upper eyelid, patellar tendon reflex absent, delayed sensation in lower extremities.

The history of this case appears to me to be sufficiently clear to place in evidence the injurious action of ergot of rye. Here is a patient with locomotor ataxia (the diagnosis of which is beyond doubt), which underwent a remarkable improvement. During this period he feels a little fatigued; he takes ergot and when he reaches the dose of a gram. per day, he finds himself paralyzed over the whole body. When the ergot is stopped this paralysis disappears gradually, leaving, however, an increased condition of tabes. It appears to me quite legitimate to attribute these symptoms to the ergot. Without doubt the weariness, which the patient felt, indicated the approach of an increase in his malady; but this attack had been singularly aggravated by ergot. The general paralysis is the result of the drug. This circumstance had applied a whip to the disease and probably left behind it some advance in the posterior spinal sclerosis. The dose prescribed certainly was not very excessive, 25 centig. at first, increased little by little to a gram.; most authors give more. Hammond, who often gives it in ataxia, administers at first a dose of at least a gram. three or four times a day, and continues during several months. Erb (who praises it but little) mentions Waldmann particularly, who gives it in from 1 to 2 grams. per day. The dose then was not considered excessive.

Since the work of Brown-Sequard and of all others who have lauded ergot in spinal lesions, it is said that the indications for the use of this remedy consists in hyperæmia of the cord. It is at the commencement of the attack, to prevent or stop it, that it is necessary to use the vaso-con-

strictor. This drug would appear, therefore, well indicated, notwithstanding it did harm. This at least teaches us two things. In the first place it is necessary that the effects of the continued use of the remedy should be watched by the physician. If M. S. had been thus watched, very probably the remedy would have been withdrawn in time to prevent the paralysis. In the second place it shows that the ergot of rye has, in certain cases of tabes, an injurious action, for which it is necessary to make calculation.

Any special physiological action of ergot upon the posterior columns has not shown itself in any particular way up to the present. Tabes or its symptoms do not figure in the classic picture of ergotism. However, we read in Nothnagel and Rossbach: "In warm-blooded animals the aqueous extract of ergot, in doses comparatively small, and without doubt, also, sclerotic acid, causes anæsthesia and trouble in the co-ordination of movement. In increased doses it produces paralysis, during which the animal, insensible to the most intense pain, does not manifest either voluntary or reflex motion." (Dietz, Lorinser, Handelin and others).

But the recent results published by Tuczek, especially deserve our notice. After an epidemic of ergotism which attacked over 500 individuals in a population of 2,500, 29 patients afflicted with mental derangement entered the Marburg asylum. Siemens has published the report of 11 in the *Archives de Psychiatrie*; and Tuczek reports 18 others, with the autopsy of 4 who died. I will leave those symptoms which pertain to the psychical phenomena and give those only relating to tabes. All the patients presented the symptoms of a lesion in the posterior column of the cord, a lesion which Tuczek directly proved by the autopsies which he made. The patellar tendon reflex was absent in all and did not return, even when the cure seemed complete. The other spinal symptoms were: lightning pains, prickling sensations, analgesia, anæsthesia, inability to stand with closed eyes, ataxia. In some cases the symptoms of tabes dorsalis were complete. The 4 cases examined post mortem were the ages of 9, 16, 20, 33, respectively. The lesion of the posterior column extended the whole length. In two cases it was symmetrical and limited to the columns of Burdach. Tuczek concluded that the ergot had

developed a medullary lesion absolutely similar to tabes. He afterwards tried to produce a posterior spinal lesion amongst animals, by injecting the ergot under various forms. A great number of the experiments failed, but he discovered that the hypodermic injection of sclerotic acid in rabbits, in doses of 3 or 4 grams., produced a genuine ataxia.

This last result, if confirmed, is very important, from the stand-point of experimental pathology. Authors hitherto have regretted that experimentation so far has failed to produce an affection of the nervous system having any analogy whatever to tabes dorsalis. But, now, remembering the experience of Tuczek, it is a fact that ergot develops, in certain cases, posterior spinal lesions, similar to locomotor ataxia. This especially merits our attention, because it explains in a certain measure that in tabetics, accidents are produced by doses of ergot incapable of poisoning a man in good health, consequently it behooves us to be particularly careful in treating progressive locomotor ataxia by the ergot of rye

Correspondence.

RATIONAL TREATMENT OF PNEUMONIA

To the Editor of the Canada Lancet.

SIR,—I am greatly interested in the circulation of your valuable LANCET among the medical fraternity of the Dominion, believing that it is entitled to a place in medical literature second to none on the continent. I have thought of addressing my brethren in the profession through your columns, taking up some points which I believe are worthy of discussion, and I think the members of the profession of the Dominion should aid you in your work by forwarding reports of cases under their daily observation. Some years ago Dr. Jacob Bigelow (the father of the celebrated surgeon of Harvard, H. J. Bigelow) published a small book, entitled, "Rational Medicine," which should be carefully read by every member of the profession, as the truths advanced might serve the purpose of arresting the hand of some irrational practitioner of medicine, and, doubtless, succeed in saving the life of some unfortunate patient.

The fact is, the graduates of thirty or forty years

ago, who left the college halls to enter the, to them *untried paths*, left behind them in regular visitation to the sick, too much of the deadly calomel, and often a blanched and almost bloodless patient to contend with drugs, disease, and the effect of the lancet. We contend in these days, that there is no necessity for much of this, I will not say all of it. A few of the doctors of the present day follow directly in their footsteps; a few still believe in the large bolus, the large blister and the large pill, and try to cure an inflammation by producing not only an inflammation, but a mortification. There is one thing certain, the big-dose men are not the popular men in the profession to-day. There is so much common-sense fact published weekly in the secular and religious press, with reference to hygienic laws and the cause and cure of disease, that the old-school practice does not take with the people. Many excellent physicians are guilty of too much prescribing, using a great variety of drugs, and changing their prescriptions almost daily, thus advancing the interests of the druggist but fearfully depleting the poor man's pocket; while half-filled bottles of medicine are laid aside, altogether useless. 'Tis no wonder that the Homœopath flourishes, rolling around the streets of our provincial towns in "gilded splendor," while the poor big-dose doctor has to drive a little phaeton, and, in some instances, gild his pills with a good big coating of untruth to make them palatable.

Rational medicine certainly consists in the recognition of the power of recovery in the system, apart from the use of any drug; and the progressive physician never places his finger on the pulse, without remembering this fact. We find a patient bolstered up in bed, breathing with great difficulty, his face dark and purple, showing imperfect aeration of the blood—an unbalanced circulation—the extremities cold, the head hot, the dyspnoea growing rapidly worse,—a condition, in short, which a good stethoscopist would at once pronounce pneumonia. Now I do not know with certainty how this disease is generally treated by the profession; but I fear from the number that die, the treatment is often *too depleting*. I believe *good treatment* will save the majority of such cases, and what I mean by good treatment, is "rational treatment." For instance, let us draw away the blood corpuscles from the plethoric and consequently over-filled lungs—draw the blood to the extremities. How

can we most easily and certainly do this, if this is the indication?

The following simple plan of treatment will, I believe, save at least ninety per cent. of all cases, except the very aged and infants. Hot mustard and cayenne pepper foot-baths, repeated every two hours. In the interim of these, a jug filled with hot water should be constantly applied to the feet, and large oatmeal-and-onion poultices assiduously applied to the chest. *Injections should be used to move the bowels rather than purges*, and in the shape of medicine, from six to ten drops of veratrum viride administered every hour. This simple form of treatment will afford immediate relief and almost certainly cure the patient, if adopted sufficiently early and persisted in as long as necessary.

So much for pneumonia. Perhaps at some future time another plain "pen talk" may serve to fill a column or so of the LANCET. Hoping that success may attend your efforts in diffusing new ideas in medicine as the world rolls on apace, I subscribe myself,

Very truly yours,

J. H. BARKER.

Upper Keswick, N. B.,
April 12, '83.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for THE CANADA LANCET.)

The Michigan State Board of Health met in Lansing, Mich., on April 11, 1883. All the members present. The minutes of the last two meetings of the Board were read and approved. The Secretary read a quarterly report of work in the office of the Board, bulletins, documents, circulars, blanks, and reports distributed, correspondence, etc. The Secretary also presented a resumé of the work performed by other State Boards of Health, and a review of sanitary legislation in other States.

The Secretary presented an account of sickness caused by eating salted pork. The sickness was attended by burning in the stomach and abdominal tenderness. Some of the meat was fed to four cats. The symptoms in the cats were, dilatation of the pupils, vomiting, great thirst, and tenderness of the muscles. Diarrhœa was not present. Three of the cats died, the fourth one being barely able

to walk after one month. They were attacked twelve hours after eating the meat. A partial microscopical examination of some of the meat by Prof. T. J. Burrill, of Champaign, Ill., disclosed nothing within the meat to have caused the illness, but on the surface of the "lean" there was found a *micrococcus* enormously numerous, as well as some fungous developments of a mould-like kind sparsely present. The *micrococcus* was of a new variety, entirely distinct from that of "hog cholera," which latter was not detected in the specimen. It is not known whether the organism was on the pork when it was used for food, and it has not yet been determined whether it is now alive. Culture experiments have been instituted to determine that point. It is quite devoid of motion and has a less dense or firm appearance than most of its congeners. It takes the ordinary aniline violet stain. Usually two are connected in a figure 8 form, rarely more.

Hon. John Avery, M.D., of Greenville, was elected President of the Board.

The Secretary presented an account of a death of a railway employé by being caught in a "frog," together with a copy of a bill now before the legislature providing for a wedge of hardwood, or other substance of equal utility, in all "frogs" of an angle of less than 45 degrees. He described the method devised by a prominent railroad man, of tamping hard coal cinders in the frog. This method is not dangerous to the travelling public, and the wedge of hardwood, by its liability to be misplaced, might throw a train from the track and cause many deaths.

Invitations to hold sanitary conventions at Muskegon and Iona were accepted, the dates to be hereafter decided upon. The President nominated standing committees on epidemic, endemic, and contagious diseases, sewerage and drainage, foods, drinks, etc.

The Secretary was requested to prepare a memorial to the President of the United States, petitioning that he place the \$100,000 appropriation in the hands of the National Board of Health.

"Have you ever tried the faith cure?" asked a long-haired, sallow-faced stranger, addressing a gentleman who sat behind him in a street-car. "I have," was the answer. "Do you believe in it?" "I do." "May I ask, then, of what you were cured?" "Certainly. I was cured of my faith."

Selected Articles.

ON SCIATICA AND ITS TREATMENT.

CLINIC BY WILLIAM PEPPER, M.D., LL.D.,

Our first patient is suffering from the painful affection sciatica. He is a big, burly fellow, a car-driver by occupation. He has always enjoyed good health, but has been a good deal exposed to the weather, working from 4.39 A.M. until 11 P.M. and getting only about four hours' sleep. This he has kept up for thirteen years. His occupation requires him to go along the river front; but he has never suffered from malarial trouble.

Last Tuesday, four days ago, after no unusual exposure, he began to have pains in the groin, extending towards the knee, and pains down the back of the thigh. The pains were, therefore, along the lines of the anterior crural nerve in front and the sciatic nerve behind. The suffering is marked at nights, beginning about 8 P.M. and subsiding at 6 P.M. He has noticed this every night. Making any movement that disturbs the hip-joint causes severe pain.

The symptoms of sciatica in its acute form are so characteristic that there is no danger of its being overlooked. In chronic sciatica, however, we have to consider carefully whether we have to deal with pure sciatica, or whether we have pain in the course of the sciatic nerve as one of the symptoms of some deep-seated trouble. In the first place, it is important to distinguish between those attacks which are palpably acute and those which are more or less chronic and in which the symptom of sciatica may be only one of several morbid conditions present. In aneurism of the aorta low down the tumor may press upon the nerves of one side, causing pain in the course of the circumflex the genito-crural, the ilio-inguinal, or the sciatic nerve. Under such circumstances there may be sciatica as one of the symptoms of a deep-seated abdominal disorder. The same thing is true in some cases of leucæmia where the abdominal glands are first involved. I have seen on several occasions the first symptoms in lymphatic leucæmia resemble those of lumbago or sciatica, and the real condition has not been recognized until the progressive failure of health and strength, the increasing anæmia, the continuous enlargement of the lymphatic glands, or the examination of the blood, has revealed the nature of the disease. In any case of chronic sciatica it is necessary to consider all sources of pressure on the nerve, and until this has been done it is not safe to say that the neuralgia is due simply to an affection of the sciatic nerve. In an acute attack like the one which this man has, we are spared all anxiety as regards this point. We at once recognize that it is a case of simple sci-

atica, involving the nerve-trunk; but this knowledge is not sufficient to enable us to treat the case intelligently.

The causes of sciatica are numerous. Let me mention a few of them. Malaria nor rarely reveals itself by some local neuralgia. The most common form is perhaps ordinary trifacial neuralgia, but there may be from this cause neuralgia of the brachial plexus, and frequently one of the sciatic nerves is involved. I have seen cases in which there was no chill, scarcely any fever, but severe periodic sciatica, which rapidly yielded to quinia. You are not to suppose, however, that because a neuralgia exhibits a marked periodicity it is malarial in its origin, for frequently neuralgic conditions resulting from the most diverse causes exhibit a marked periodicity,—*i.e.*, tending to recur at the same hour on succeeding days. Although this man has been exposed to the malarial poison along the river edge in the early mornings and evenings, and although his neuralgia exhibits periodical exacerbations, we are not to assume at once that it is of malarial origin.

In this connection I shall call attention to the presence or absence of pain over the point of emergence of the nerve as a means of some value in the differential diagnosis. In all neuralgias painful spots are found over the points of exit of the nerve affected. In sciatica it is where the nerve passes through the sacro-sciatic foramen. In the purely malarial affection it has seemed to me that the local tenderness is less marked than it is when the neuralgia is dependent upon a definite lesion of the nerve-sheath and trunk, so that excessive tenderness over the point of emergence and excessive pain on motion constitute to my mind evidence against the purely malarial origin of a periodic neuralgia. In neuralgia due to malaria the local tenderness in the interval is slight, but during the paroxysm there is undoubtedly a congestion of the nerve-sheath causing local pain and tenderness; but on the disappearance of the congestion these subside, while if the neuralgia is due to some local lesion of the nerve the tenderness is extreme and more or less persistent. In cases where there is doubt as to the cause of the trouble, the use of quinia in full doses is a therapeutic test that should never be neglected.

Again, I have seen several cases of sudden, severe sciatica in workers in lead. We more commonly see abdominal neuralgias from this cause; but lead-poisoning may also cause a neuralgia of peripheral nerve-trunks.

Far more frequently the neuralgia results from some congestion of the nerve-sheath, often associated with a gouty or rheumatic diathesis; and even though there is no gouty or rheumatic tendency, exposure to damp and cold may cause a sudden congestion of the nerve-sheath, with such pressure upon the nerve-trunk as to give rise to the most

intense pain. This condition may affect any peripheral nerve, as the cranial nerves, the branches of the brachial plexus, very frequently the intercostal nerves, and the sciatic nerves. This is the most common cause of acute sciatica. We are to distinguish between rheumatic neuralgia and that due to simple congestion by the history of the case, by the presence or absence of the rheumatic or gouty diathesis in well-marked form, and by the existence or non-existence of symptoms of rheumatism or gout in other parts of the body.

Neuralgia from any of these causes may pass into the chronic form, and thus the most usual causes of chronic neuralgia are malarial, some toxic influence, or a subacute inflammation beginning as an acute attack and running into a subacute or chronic form, with persistent thickening of the nerve-sheath and constant pressure upon the nerve-trunk.

In addition, sciatica may be an expression of the neuralgic constitution. This is associated with a special condition of system, and is found in anæmic individuals of morbidly sensitive natures. It is in such cases that we see neuralgia in its most protean form. These cases are usually recognized with ease.

In the present case the diagnosis is between malarial neuralgia and simple peri-neuritis of the sciatic nerve. The fact that this man has never had malaria, the fact that there is intense tenderness over the point of emergence of the nerve, and the fact that this persists during the intervals between the spells of pain, render it probable that, this sciatica is due to simple congestion.

Sciatica gives rise to very severe pain whenever such motions are made as disturb the relation of the sciatic nerve to the opening through which it passes. The patient may walk pretty well as long as he keeps the leg stiff, but the moment he makes the slightest motion which disturbs the relation of the nerve at its point of exit he is seized with a violent paroxysm of pain. The pain is usually referred to a point between the trochanter and the tuber ischii, thence it extends along the course of the nerve. If the lesser sciatic is alone involved, the pain does not go below the knee, but when the main sciatic nerve is affected, the pain may extend into the calf of the leg and into the foot and radiate through the various branches of the nerve. The pain is often associated with a feeling of fulness, weight, and tingling. There may be at the same time a painful condition of other nerves. In this man there seems to be involvement of the anterior crural nerve.

In all cases of neuralgia there is this tendency to periodicity, the pain being more severe at one period than at others, and sometimes entirely disappearing. The spells of pain more frequently occur during the night, but they may occur during the day. If this neuralgia were purely malarial,

it is probable that the paroxysm of pain would come on at the time that a chill usually appears,—that is, in the early part of the day.

The treatment is based upon a careful study of the causal condition. I shall treat this man in the following condition. The pain is so severe that I shall have injected, morning and evening, into the deep tissues of the thigh a solution of morphia and atropia :

Morphiæ sulph., gr. $\frac{1}{6}$;
Atropiæ sulph., gr. $\frac{1}{80}$.

When thrown deeply into the tissues the injection does much more good than when simply placed beneath the skin. The puncture itself is useful. The mere penetration of the tissues with a needle unquestionably does good ; still more benefit is obtained when the puncture is followed by an injection of simple water ; but of course the best result is derived from the injection of a solution containing a suitable anodyne.

It is an old observation that puncturing the tissues over a painful nerve would relieve the pain.

The practice of acupuncture, by plunging solid needles into the tissues, for the relief of neuralgia, dates back thousands of years in the Chinese practice of medicine. In China there is a caste or class of people whose business it is to practice acupuncture. The needles which they use for the treatment of sciatica are very long, made of fine gold, brought to an exquisite point, sometimes worked with a spiral and sometimes perfectly smooth. These are rapidly rotated between the thumb and index-finger and inserted to a great depth. It has been supposed that the relief afforded is due to puncture of the nerve-sheath, allowing the escape of some exudation which causes pressure upon the nerve. I do not think, however, that this is at all probable, for the anatomical knowledge of those who practice this treatment is very slight, and even if they succeeded in reaching the nerve-sheath the needle would probably be introduced too far and injure the nerve itself ; and, again, the opening would be so small and the tissues are so elastic that very little fluid could escape.

Some attribute the good effect of puncture to the influence of the mind over the body, while others think it due to reflex action on the vasomotor nerves. I do not care to spend time to-day in considering the correctness of these explanations ; but the fact that mere puncture does good in neuralgia is undoubted.

Let me here say that, while I confidently recommend hypodermic injections of morphia I earnestly protest against their use in chronic neuralgia. In no disease will you find the opium habit more readily contracted than in chronic neuralgia. The attacks come on so frequently and so violently that the patient soon becomes the victim of this most troublesome habit. In such cases I should far rather resort to some other means of relieving

the pain than injections of morphia. In this instance I have no hesitation in employing morphia, for the necessity for its use will pass away in a few days.

We should by all means use some form of counter-irritation over the affected nerve. I shall first use a blister; but if the case proves obstinate the actual cautery should be resorted to. I shall apply a blister three inches by four inches.

Internally I shall, for two or three days, give him thirty grains of quinia a day. I do not give it with the idea that it is going to cure the neuralgia, but because his history justifies a suspicion of malarial poisoning, and, even if there is no malarial element, the effect of the quinia upon the vessels of the affected part and its influence upon the general nervous system cannot fail to be of benefit. After a few days the dose of quinia will be diminished and arsenious acid be associated with it. When the injections are stopped I shall also give him belladonna and iron. I shall immediately put him on iodide of potassium, five grains four times a day.

This will constitute the treatment, and by the middle of next week the man will probably be able to return to his work.—*Med. Times.*

TREATMENT OF CANCER OF THE UTERUS.

We make the following extracts from a very interesting and readable clinical lecture on "Cancer of the Uterus," by Prof. W. Goodell, author of *Lessons in Gynecology*. The case under discussion was that of a woman aged 37, a multipara, who suffered from menorrhagia, bleeding after coition, and a foul-smelling discharge. As regards physical examination, he says:—"Passing my finger into the vagina, I come upon a sore which is characteristic. It is crater-like. There is a hard, irregular margin surrounding an excavation, which has on its bottom and sides friable granulations. This is typical of carcinoma."

"The examination that I made has caused a little bleeding. That is one reason why you should never use a speculum in these cases. The finger tells the whole story, and the speculum may cause a hæmorrhage difficult to control."

"What about the prognosis? It is very unfavorable. Out of all the cases on which I have operated, and of which I know the after results, only three have I considered cured. Still, I can prolong life, and that is a great thing. In some of the cases on which I have operated, the disease has not returned in the cervix, but in some other part of the body. I have operated on women apparently in the last stages of the disease, so low that you would not give them two weeks' lease of life, and have seen them get out of bed and live

for over two years. My experience is, that the older the woman the more likely is the operation to be followed by success. In younger women there is more blood in the part, there is a luxuriance of growth, and they are not so apt to be benefited by an operation."

In reference to treatment, Goodell says that Freund's operation is rarely permissible, and then only when the womb is freely movable. "The operation which I shall perform to-day will consist in scraping away the cancerous matter as far as possible, and trying to reach healthy structures. The removal of the friable granulations will arrest the bleeding, which may not return. In doing this, I shall use this serrated curette, and this fenestrated forceps. In buying a fenestrated forceps, you should get it with the obstetrical lock, so that you can fasten the blades securely together. I am removing a large quantity of this most offensive material, and my fingers are going to smell very badly. How shall I get rid of it? I shall first wash them well with soap and water, and then with turpentine, which is very useful under these circumstances. Then I shall again use soap and water, with another go with the turpentine. After this I shall probably immerse them in carbolised water. Permanganate of potassium is an excellent disinfectant, but it has the disadvantage of so staining the hands that one is not presentable for several days after its use."

"Now, suppose a woman comes to you and you diagnose cancer of the uterus, are you going to say, 'Madam, I am very sorry to tell you that you have a cancer?' No, don't you do that. I should not tell even if she asked me to tell her the truth; but in the majority of cases they do not want to know, and will say to you, 'Now, doctor, if you find a cancer, don't tell me.' No matter how good a woman is, or how fully prepared for the future she may be, the knowledge that she has a cancer is a terrible blow, and she at once gives up, begins to go down hill rapidly, and soon dies. I never, except in very rare instances, tell the patient that she has a cancer; but I always tell some member of the family, or a friend, exactly what is the matter. Suppose the patient asks straight up and down, 'Is it a cancer?' You do not want to tell a lie, and you do not want to say that it is a cancer. I get out of it in this way: I say, 'This is not that kind of a cancer which you understand. This is not a hard cancer like that which comes in the breast, and which is hopeless. You have a bad ulceration of the womb. It is not hopeless; there are cases which are cured.' In the case which I have mentioned, where the lady took thirty-five grains of morphia a day, the word 'cancer' never passed my lips, nor did it pass hers. None of the members of the family used that word, yet she knew as well as I did that it was a cancer. It was always spoken of as that 'bad

ulceration.' About three years ago I learned a lesson on this point. I was asked by a physician to see a near relative of his. His suspicion was that it was a cancer. I said to him, "Suppose that this is the case, shall I tell the lady?" He replied, 'Yes, she ought to know; tell her by all means.' After I had examined and found a carcinoma, I said, 'I am very sorry to say that this is malignant,' and then went on and told in so many words what the trouble was. She never rallied from that. She made up her mind that her days were numbered, and there was no use in doing anything, and in a short time she died. I say, then, never tell a woman that she has a cancer.

"I have now made a funnel-shaped opening, into which I can readily introduce three or four fingers; before, I could barely get one in. I have not gotten into the bladder nor into the peritoneal cavity, but I am afraid if I go farther posteriorly, that I shall open Douglas' pouch. I can trace the cancerous tissue to the internal os, but it does not pass to the cavity of the womb.

"You see that while there has been some hæmorrhage, still it has not been alarming. Sometimes there is unpleasant hæmorrhage. During the operation you are not apt to have much hæmorrhage if you work rapidly, and quickly get down to healthy tissue. If hæmorrhage should occur, do not use Monsel's solution (the sub sulphate of iron), for it makes plaster-like clots, and so corrugates and contracts the parts that you cannot continue the operation. Under these circumstances, ordinary cider vinegar seves an excellent purpose as a hæmostatic, without the inconveniences of Monsel's solution.

"Having removed as much as possible of this friable material, I purpose to apply fuming nitric acid to the raw surface. Usually, I prefer the application of Paquelin's thermo-cautery; but the instrument is out of order, and I do not think that I can reach all parts as well with the cautery as with a fluid. I apply the acid with a piece of cotton, allow it to remain for a short time, and remove by injecting water. I then again apply the acid. It is not necessary to use alkalies or oil to neutralize the acid. If enough water is injected, it will so dilute the acid that it cannot injure adjacent parts.

"There will be but little pain from the operation, but she will probably feel some soreness from the position in which the limbs have been held. When she is put to bed she will receive a suppository of the extract of opium (gr. j).

"I am sorry to say that these cases are very common. Cancer is, I think, on the increase; but why it is I cannot say. The disease more frequently affects the uterus than any other part of the body, unless it be the breast.

"You see that I have a little wound upon one of my fingers, but I am not afraid of inoculating

myself with the cancerous matter, for I am in good health. If I were run down, it might be somewhat hazardous to get such offensive matter on a wound. It is the same with dissecting wounds, which occur usually toward the end of the session, and with those who are overworked. This is not the case with venereal disease. No matter whether the health is good or bad, one is liable to be inoculated with syphilis. Nothing would tempt me to thrust my finger into a vagina in which I knew there was a chancre. It was only yesterday that I was asked to take charge of a patient who had a chancre, but I absolutely refused to have anything to do with it. Some years ago I got caught. After examining a case, there appeared on my fingers a sore which would not heal. I shewed it to Dr. Agnew, and he pronounced it to be a chancre. For awhile I believe that I was the most unhappy man in Philadelphia. The diagnosis, I think, was incorrect, for the sore disappeared, simply leaving a scar, and was never followed by any constitutional symptoms. A burnt child dreads the fire, and I cannot be hired to put my finger where I know there is a chancre. Winter before last, in one of the ward classes, after I and a number of the gentlemen had examined the uterus in one of our patients, she called attention to a sore in the vagina, which proved to be a chancre. Some of the gentlemen looked rather frightened, and I cannot say I liked it very well myself.

"A number of years ago, I attended a respectable woman in confinement. I then lost sight of her for several years, when she again wished me to attend her. When I called to see her, I noticed that she kept herself wrapped up. As on the previous occasion it had been necessary to use the forceps on account of the narrowness of the pelvis, I was prepared when the head would not come down, to apply the forceps. When I exposed her, I found the nates and buttocks one mass of venereal disease, and her neck was raw from the same trouble. I would have presented any gentleman with a hundred dollars to have applied the forceps and delivered the child. I stripped my arms to the elbows, and thoroughly applied a mixture of carbolic acid and vaseline. I then applied the forceps, using one hand only in the vagina. As soon as they were in position, I ran out of the room, and carefully washed my hands, and again applied the carbolised vaseline. I then delivered her, and again washed myself with the utmost care. For a number of days I waited anxiously to see what the result would be, but no bad effects followed."—*Glasgow Med. Four.*

Frequent micturition, where no special cause appears, is best treated by passing a weak galvanic current from the lumbar region to the region of the bladder.—*British Med. Journal.*

PLASTER-OF-PARIS DRESSING IN INJURY TO THE ELBOW-JOINT.

Clinic by Prof. JAMES L. LITTLE, M.D., New York Post-Graduate Medical School.

GENTLEMEN,—The patient that I now show you is a boy of about ten years of age, brought here by Dr. Griswold, of this city. He sustained an injury to his elbow, which has resulted in an inflammation of the joint of a subacute character. Dr. Griswold tells me that when he saw the case, some four weeks ago, he detected marked fluctuation upon the outer side of the joint. With the aspirator he removed about two ounces of pus. Probably you remember that I presented this case to you a week ago. I then detected fluctuation over the seat of the former abscess, and naturally concluded that it was refilling. At that time, as you will remember, I applied a plaster-of-Paris splint to the arm and forearm without altering its position, the idea being to keep the joint at rest. I told you that I would come to-day prepared to anesthetize the patient and bring his arm into a flexed position, a little less than a right angle, so that if ankylosis resulted the limb would be in a good position for use. It was also my intention, as I told you at that time, to open the abscess, make a thorough examination, under strict antiseptic precautions, and ascertain whether the abscess was connected with the joint, introducing a drainage-tube, if necessary, and dressing the part according to Lister. But you see that the general condition of the patient is very much improved. Upon examination I find that the swelling around the elbow has entirely disappeared, so that no fluctuation can now be detected. No operative interference, therefore, will be necessary, so far as the abscess is concerned. I wish, however, to put the arm in such a position that, should the joint become stiffened, the limb will be of some service to the patient. To this end the boy has been thoroughly anesthetized, and I now forcibly flex the arm to a little less than a right angle, so that the hand touches the mouth. While the limb is held in this position I apply a plaster-of-Paris splint to the anterior portion of the arm and forearm. This, as you will see, is made of two thicknesses of bleached cotton flannel, wide enough to enclose about one-half of the circumference of the limb. The flannel is thoroughly saturated in a mixture of plaster-of-Paris and water. A strip of the same material, about an inch and a half in width, saturated in the plaster-of-Paris, is applied around the arm, just below the upper extremity of the splint, and another similar band above the wrist, to retain the anterior splint in position. While the plaster is still wet, and with the arm held in the desired position by my assistant, Dr. Powell, I apply an ordinary roller bandage tightly from the hand to the shoulder, moulding the flannel to the limb.

Having accomplished this, the limb is held in the position in which we have placed it until the plaster is set. This takes but a short time. The plaster is now hard, and I remove the bandage, and, as you see, I have a beautiful plaster-of-Paris anterior splint, which is unyielding, and will hold the arm in its present position. At the same time the dorsal surface of the joint, from the external to the internal condyle, is uncovered, so that its condition can be observed from time to time. A dry cotton roller is now applied from the hand to the shoulder, and the dressing is complete, and its appearance is shown in the following figure.



With plaster applied in this way you can make an angular splint to cover any part of the forearm or arm. This dressing has one advantage over all others, inasmuch as after its application the limb can at once be placed in the desired position and held there until the dressing becomes hard. Another advantage is that it can be applied directly to the skin without any irritation resulting. If hairs exist upon the limb, the surface should be smeared with oil or vaseline before applying the splint.

The length of time that I shall allow this dressing to remain upon the patient will depend upon the progress of the case. If the inflammation subsides rapidly, and the pain disappears, it can be removed in a short time and passive motion begun.

—*Med. News.*

DIABETES AND DIABETIC COMA.—Dr. Stephen Mackenzie, Physician to, and Lecturer on Medicine at the London Hospital, in a paper bearing this title, and originally read before the British Medical Association at Worcester, in 1882, gives a total of thirty-seven fatal cases of diabetes in the London Hospital from the beginning of 1874, to Midsummer, 1882. "From this series of cases, twenty-one of which have been under Dr. Mackenzie's own care, it appears that coma and phthisis are the two most common modes of termination of diabetes. Coma is a much more common ending of diabetes than is often supposed by those who see but few cases of the disease. In this series coma of a peculiar kind was the termination

of diabetes in nineteen out of thirty-seven cases, or in just over half the number. Of these nineteen cases of coma, in seven *post mortem* examination showed no gross visceral disease to which the coma could be attributed; in four cases without *post mortem* examinations, there was no *ante mortem* evidence of visceral disease in three, and in one there were well marked signs of pneumonic phthisis during life. Further, there were eight deaths from coma, with old or recent pulmonary disease found at the necropsy; in some of these the affection of the lung was insignificant, in others advanced. The coma that closed the scene in cases of diabetes, implicated (or followed) by pulmonary disease, had certain special characters, to be presently described, showing its connection with diabetes rather than with phthisis. It is not the mere loss of consciousness that terminates so many exhausting diseases. Suddenly developing coma is an unusual ending of ordinary phthisis. Besides these nineteen cases, in three others death was by coma, but an obvious explanation was presented on *post mortem* examination—viz., cerebral hæmorrhage, meningitis, suppurative nephritis. *Onset*.—Pain in the epigastrium or hypochondria, often very severe, sometimes ushers in the attack, and may precede for several days the coma. Delirium, usually of a light garrulous kind, is observed in some cases. Rapidity of pulse is occasionally the first indication of impending coma. Vomiting and diarrhœa, separately or together, were noticed in some cases for a day or two before the attack. Severe headache precedes the coma in others. Fatigue, as pointed out by Prout, and noticed by nearly all who have written on the subject, often determines coma, and the latter is thus frequently induced by a journey. *Special Features of the Coma*.—One of the most striking symptoms in most, though its degree varies in different cases, is a peculiar laborious breathing—an “air-hunger,” extraordinary efforts of filling the chest being made. The patient lies gasping for breath, like a person after violent exercise, whilst no condition in the respiratory organs accounts for its occurrence. Sometimes, this dyspnœa precedes the coma, sometimes the dyspnœa and coma appear together. The coma in most cases commences gradually. The patient can at first be roused, but steadily progresses until it is profound. It occasionally commences more abruptly, and in a few cases passes off, usually to return. The surface of the body is generally cold, and the skin and mucous membranes livid; the pulse is rapid and small, and ultimately becomes uncountable. The external and internal temperature sinks exceedingly low, and Dr. Mackenzie has known the temperature in the rectum to be little over 90° Fahr. This combination of coldness, lividity, and rapid pulse has led me for some time to call the condition “coma-collapse.” Incontinence of urine is

noticed in some patients. The breath has been noticed by some good observers to have a peculiar odor, like sour beer, vinegar, acetic ether, acetone, etc.; but in no case that Dr. Mackenzie had observed has this been detected, though he has been on the outlook for it since 1874, and has directed the attention of those watching the patient to the point. Dr. Frederick Taylor's experience is similar. It has been said that a high temperature is necessary for its occurrence, owing to the low volatility of acetone. The urine is also said sometimes to give off a similar odour, but the author has not noticed it even when evaporated. In some cases, the addition of a solution of perchloride of iron to the urine produces a deep brown colour. This, which is a test for acetone, Dr. Mackenzie has noticed in some cases.—*British Medical Journal*.

BASILYSIS IN DYSTOCIA.—In the March number of the *Edinburgh Medical Journal* Professor Simpson presents a communication on basilysis as a substitute for other methods of diminishing the head in appropriate cases of dystocia. Previous articles by the same author have recommended the method, and the present one contains the account of its successful employment in a case of hypertrophic elongation of the cervix. The woman had some pelvic deformity, and at the time she was seen, about ten hours after the labor began, the os projected two inches from the vulva; it admitted two fingers, and at a full finger's length from the os the vertex was felt presenting, with membranes intact. There was evidence that the fœtus was dead, and while the lips of the os remained half an inch thick, the lower part of the body and the upper part of the cervix were becoming dangerously thinned.

The occiput being to the right and a little posterior, the basilyst was used to perforate the left parietal and upper edge of the left temporal bones, and the point of the instrument was then guided to the anterior part of the base, in front of the sella turcica, and screwed in to the shoulder. When the blades had been separated it was felt that the structures were broken up. To effect more comminution the instrument was again applied just behind the sella turcica, and on its withdrawal the base of the skull felt relaxed. No blood escaped during this proceeding, showing that the child was dead, and the maternal structures were not injured. Some brain matter escaped during the operation, and the rest was evacuated by douching. Traction on the head was made by the fingers, support and counter-pressure being applied to the lips of the cervix during its extraction. The head was delivered easily, but difficulty was experienced with the shoulders, the circle of the os fissuring in different directions, especially at the left side, where the parts were somewhat thin. The distension by the shoulders also wounded the left

nympha and adjacent portion of the vestibule anteriorly and the right posteriorly. The cervix was well douched with carbolyzed water, and digital pressure applied to the wound of the left nympha in order to stop the bleeding. The placenta was expelled in about twenty minutes, and shortly after some (post-partum) hæmorrhage occurred. This, though not in itself excessive, brought the patient into a very critical condition, from which appropriate treatment ultimately rescued her, and she made a good recovery.

The basilyst, as now constructed by Professor Simpson, is an exceedingly simple instrument, consisting essentially of two blades of equal thickness, which are introduced in close apposition. They thus form a cylindrical shaft, at the pointed extremity of which is cut a screw-thread.

The encephalon may be thoroughly churned up and the opening enlarged by separating the blades after the cranium has been perforated. The skull is then washed out, and the screw-tip directed so as to pierce the ethmoid and sphenoid, or (as in this case) also the base of the skull further back, so that the whole base may be broken up. After the operation, the thumb passing round the forehead at the level of the orbital processes, and the fingers passing about the occiput, the tips of the thumb and middle finger met, showing that the head would then pass through a canal with a diameter of only two inches. In this case the diseased and friable tissues of the mother contraindicated the use of forceps. The author claims for his instrument that it does not cost more than the perforator in common use amongst us; and that it has the immense advantage that, whilst it as easily perforates the vault of the cranium, it can further break up the unyielding base, and thus in many cases render us independent of any further head-crushing implement or apparatus.—*Boston Med. Journal*.

INHERITANCE OF CANCER.—In the course of a paper on the Local Origin of Malignant Growths, read in the Section of Pathology at the last annual meeting of the British Medical Association, Mr. Jonathan Hutchinson observed: "It is needful to say a few words as to the Inheritance of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice,

may, perhaps, be usefully classed as three, senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts, as regards chimney-sweeps' cancer, give perhaps the best illustration of what I mean. Before this malady was practically suppressed by Act of Parliament, I believe it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with much greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instance by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what it is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can be given will be to say that it is a peculiarity in cell-structure generally; not germs, not a blood-malady, but a special type of cell organization, permitting, with greater ease than in other persons, the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for one moment doubt that, in some instances, the inherited proclivity may be so strong, that it does not wait for the help of any exciting causes, but manifests its power in the production of a cancer which may be considered spontaneous. It is probably in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue proclivity may be transmitted, possibly even germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance, I wholly deny that we can allow it rank as a true cause of cancer."—*Brit. Med. Jour.*

THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.—Dr. Sidney Ringer, Prof. of Medicine in University College, London, and Dr.

Harrington Sainsbury make the following important observations on certain well-known drugs, after discussing the physiological effects of the agents mentioned in the title of their paper :—"Clinically, the dangers of bromide of potassium and of chloral have been recognized; and thus in our text-books, we find the statements that the presence of grave adynamic symptoms contra-indicate chloral and bromide of potassium. Opium, on the other hand, in such adynamic states, frequently appears to lend actual support. The results of definite experiment we find to accord with the results of clinical experience; and the value of the former lies in that they confirm, and by their definiteness must tend to enforce, the teachings of the latter. The choice of a drug is, however, no simple matter; an advantage here may be outbalanced by a disadvantage there; and practical men may object that they would gladly give opium, but that the disordered stomach, blunted appetite, inactive liver, and torpid intestines, more than outweigh the advantages of opium administration. This clearly is a matter for consideration in the individual case under treatment; and the decision will have to be according as one or other element, asthenia, or derangement of the digestive, etc., powers, is most to be feared. These objections to opium, on the one hand, and chloral and bromide of potassium, on the other hand, raise the question as to whether, in very many cases, a drug, at present rather extensively used, especially in America, viz., bromide of sodium, might not with advantage be substituted in their place. The salts of sodium generally contrast very markedly with those of potassium; for the chlorides, bromides, and iodides of these two metals, the lowest figure would represent the potassium as ten times as active as the sodium. These precise numbers refer to action on the ventricle of the frog's heart (See *Medico-Chirurgical Transactions*, vol. lxxv, concerning the action of the salts of potash, soda, and ammonia on the frog's heart), but on all hands the evidence is forthcoming that, whilst salts of potassium are very poisonous, those of sodium are very slightly so. One of the marked points of contrast between the two sets of salts is to be found in respect of inhibition; potassium salts inhibit the frog's ventricle strongly, sodium salts scarcely at all. Here, however, we are considering drugs as to their cardiac effect; and, in respect of this, sodium bromide would rank far ahead of bromide of potassium, chloral, or opium, as to innocuousness. The objections holding for opium would not apply here, for sodium salts are generally very little disturbing to the tissues. With these advantages the general verdict of clinical experience is to the efficacy of bromide of sodium as a hypnotic, and, indeed, as a substitute for bromide of potassium; and should this position but be maintained, it is clear that bromide of sodium will be in very many cases the sedative above all others to be selected."—*Brit. Med. Jour.*

TREATMENT OF SUMMER DIARRHŒA IN CHILDREN.—Dr. A. Muller (*Transactions of Lancaster County Medical Society*). Attention to diet is a very important point in the treatment of diarrhœa. In regulating the diet, we will often remove the cause of the disease, which is commonly induced by improper food, and which may often be remedied by attention to this point alone; while no medicines will be of any account if this be neglected. In the beginning of the attack, gum-water and barley-water form very good articles of food and drink. Milk had better be diluted with water, even to the extent of one-half, as in its pure state it is almost always too strong for the delicate stomach, and yet more sensitive intestines. Rice forms a very good article of food, if thoroughly boiled (especially if the child is not at the breast), as it, as a matter of food, leaves very little excrementitious matter. But if the child is nursing, the mother's milk is sufficient; and by far the best diet for it, provided her health is in a good condition. Keeping the surface warm and the skin in a good condition are very important in the treatment of diarrhœa, hence the utility of warm clothing, warm baths, fomentations to the abdomen, and friction. A flannel bandage around the abdomen is often of great service, both from the warmth it imparts, and the support it gives to the viscera within. The feet should be kept warm. Pure air and an equable temperature are also very essential.

As to medicines, the question of giving an aperient at the onset is to be considered. If the child has been fed on improper food, and we have reason to think that indigestible articles of diet are in the alimentary canal, it is proper to begin the treatment by an aperient, in the shape of castor oil, magnesia, or some one of the preparations of rhubarb. But when the infant is very young, and fed on nothing but the mother's milk, and the evacuations profuse, we must in all cases try to moderate the discharge from the bowels. This can be done by the exhibition of some of the vegetable astringents, either alone or combined with opium in properly guarded doses, and antacids. A very good method of administering opium, is in the form of Dover's powder, where we have the sedative effect of the opium and the diaphoretic action of the ipecachuana. Although some may object to giving opium to a very young child, we meet with cases in which the pain and tenesmus are so great that it is our sheet anchor. Mercurials are also very necessary sometimes where there is a lack of bile in the evacuations, they being white or clay-colored. The form in which I generally give it, is the hyd. cum creta. When we have green and acid stools, some of the antacids are to be given in the form of lime-water, creta prep. or chalk mixture. In cases of high fever, nitre may be given, in the form of nitrate of potash or spts.

ether nitr. When diarrhoea has long existed, the use of turpentine is occasionally of great service, especially if much flatus exists in the bowels. In cases where the head is involved, or likely to become involved, great benefit will be derived from the use of blisters on the side of the head, back of the ears, or the nape of the neck. Cold in the form of cloths wrung out of ice-water to the top and front of the head at the same to be used.—*Am. Med. Digest.*

THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.—Mr. W. J. Walsham, F.R.C.S., Assistant Surgeon to, and Demonstrator of Orthopædic and Practical Surgery at St. Bartholomew's Hospital, writes: "During the past autumn, whilst in charge of Mr. Willett's wards, it fell to my lot to tie the femoral artery three times for popliteal aneurism. In each instance two ligatures were applied, a little less than half an inch apart, and the artery completely divided between them. The ligatures used were kangaroo-tail tendon; the wounds did well; the operations were performed strictly antiseptically; and in each instance the patient made a good recovery. If two ligatures be applied, and the vessel divided between them, all risk of two free a separation of the sheath is absolutely avoided, as one ligature can be applied at the spot where the sheath is separated above, and the other where the sheath is separated below. After the vessel is divided, each cut end retracts, drawing the respective ligatures well into the sheath, thus leaving the blood-supply of no portion of the vessel on the proximal and distal side of the upper and lower ligatures respectively in any way interfered with. The artery is thus placed under very nearly the same conditions as one which has been ligatured in a stump, and exactly under the conditions as one the ends of which have been secured in a wound, and from such secondary hæmorrhage is very rare. Indeed, I am not aware that, after the two ends of a divided vessel have thus been tied in a wound, hæmorrhage, except from the slipping of a ligature, has ever occurred. The normal longitudinal tension of the vessels constitutes another and, I believe, not inconsiderable source of danger in ligaturing an artery in its continuity. A transverse wound of an artery, as first pointed out by Mr. Savory, in consequence of this elastic tension, assumes a diamond shape. Should any part of the ligature cut through the vessel before it has become permanently occluded, this tension, by causing such a cut in the vessel to gape, thereby disturbing the connection of any internal clot that may have formed, or adhesions of the coats that may have taken place, must tend to the production of secondary bleeding. In a case of secondary hæmorrhage, under the late Mr. Callender, on cutting down at the seat

of ligature to secure the bleeding points, the hæmorrhage was clearly seen to be due to such a cause. The vessel, which had been secured by a catgut ligature, had given way opposite the knot (which itself was intact), and a gaping wound one-tenth of an inch wide existed in the walls of the vessel. By applying two ligatures, and dividing the vessel between them, all tension is taken off, and both ends are placed in a state of rest—the most favourable condition for healing. It has been objected that the application of a second ligature and division of the artery detracts from the simplicity of the operation—a point, I suppose, other things being equal, always to be aimed at in surgery. In this instance, such an objection appears to me to be a mere question of sentiment, and, as such, I venture to think, is of little moment, if, as I believe, it is a fact that, by using two ligatures and dividing the artery between them, greater safety is obtained."—*British Medical Journal.*

TREATMENT OF TYPHOID FEVER IN ZIEMSEN'S KLINIK.—At the commencement of the disease, if there be constipation, calomel is usually given in doses varying from 0.5 to 1.5 grm. As soon as the temperature in the axilla passes 39.5° C. (103° F.), baths are employed, generally two or three hours at the temperature of the room, about 16° R. (65° F.) The patient remains *sitting* in the bath about fifteen minutes, whilst the back, neck, and chest are being constantly bathed with the water, as in this manner the heat is extracted more gradually and the inspirations are rendered deeper. In some cases of already existing or threatened cardiac weakness the baths are omitted altogether, but only rarely, however; but the temperature of it raised to 22° to 25° R. (88°—88° F.), and when the patient is in it is gradually reduced some degrees. Some alcohol is given both before and after each bath. If the baths fail to produce a decided effect on the temperature, antipyretics are administered. Koth's mixture—which consists of acid carbolic and sp. vini, aa 1 grm.; tr. iodi., gtt. x.; tr. aconiti, grm. j.; aq., grm. 50; syr., 10 grm.; ol. menth, gtt. ij., M., of which a teaspoonful is given hourly—has been extensively employed, but quinine still holds its ground. It is given, not too frequently, in full doses of 15 to 30 grs. every second day. If diarrhoea be profuse, it is checked by the use of starch enemata, to which have been added 20 m. of tinct. opii. This latter also serves the purpose of calming the patient, and thus rendering the attendance less laborious, and may be repeated several times in the course of twenty-four hours. The nourishment consists mostly of broths, with yolk of egg and milk. Wine is given from the commencement, the quantity and alcoholic strength mounting with the cardiac weakness. Stokes' mixture and freshly-pressed beef-juice are favorites in the height of the fever, or when collapse is threat-

ened. The diet remains unaltered until the eighth day after the subsidence of the pyrexia, after which easily-digested farinaceous and flesh foods are given; whilst the ordinary sick diet is not returned to until after the lapse of another week.—*The Medical Press*.

CHROMIC ACID IN AFFECTIONS OF THE TONGUE.

—Mr. Henry T. Butlin, F.R.C.S., has used chromic acid in certain affections of the tongue, with markedly good effect. In June, 1881, he treated two cases of glossitis with a ten grain solution of chromic acid in water, painted on the sore areas of the tongue three or four times a day. Both cases improved. A case of secondary syphilitic, deep and jagged ulcers of the tongue, and ulceration of the inside of the cheek, which showed no improvement under hyd. c. cret., iodide of potass., or liq. hyd. bichlor., were, after a week's treatment with chromic acid solution, almost completely healed. Another case of flat mucous tubercles, due to secondary syphilis on the right border of the tongue, which had resisted treatment with hyd. c. creta for about three and a half months, was almost completely cured in three weeks.

Mr. Butlin has used chromic acid in several different inflammatory conditions of the tongue, in many cases with most gratifying success. In 27 cases, 20 have been cured or greatly relieved, 7 having received little or no benefit. The seven cases were either of chronic superficial glossitis, or of tertiary syphilis. The twenty include seven of chronic superficial glossitis and thirteen of various secondary syphilitic affections. Mr. B. concludes that chromic acid cures with marvellous rapidity secondary affections, ulcers, mucous tubercles, and condylomata. It produces no appreciable effect on tertiary affections, gummata, extensive ulcers, or tubercular syphilides. Some cases of chronic superficial glossitis, with slight ulceration and renewed inflammation are rapidly benefited by it. In cases of glossitis in which the tongue surface is attacked by a fresh inflammation of great severity, glycerite of boracic acid and soothing remedies are more suitable; chromic acid rendering these worse. He reports one case of tertiary syphilitic ulcers of the tongue which was cured in about two months by combined chromic acid and mercury treatment, although it had obstinately resisted purely anti-syphilitic treatment for many months. The strength of the solution usually employed is grs. x— $\bar{3}$ j water; in some cases grs. xv— $\bar{3}$ j. The patient is told to paint the diseased parts three or four times a day with a camel's hair brush dipped in the solution. There is seldom any pain or discomfort; sometimes a little smarting at first.—*Practitioner*, Mar., 1883.

PREVENTION OF LACERATION OF THE PERINÆUM.

—Mr. Alexander Duke, M.K.Q.C.P.I., Obstetric Physician to Dr. Steevens' Hospital, Dublin, re-

marks: "The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the textbooks on midwifery) is this:—When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and at the onset of a pain, draw back the perinæum firmly, but gently, towards the coccyx, relaxing the tension gradually as the pain lessens, till the next ensues, and so on, till I can draw back the perinæum with very slight effort. I thus tire out the muscular structure, and produce sufficient relaxation for the head to pass.

"In most cases so treated there is no danger of the perinæum, but when the pubic arch is narrow, (which can be easily determined) I take the additional precaution of raising the patient's left hip, and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction of lard or vaseline, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx, or a finger in the rectum, leaving the perinæum untouched. It has always seemed anomalous to me that the perinæum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

"The drawing back of the perinæum produces no additional pain to the patient, as it is done during an uterine contraction, and I feel sure that if nurses and students were educated as to the proper way of preparing the perinæum previous to its distension with the presenting part, we should see and hear less of lacerated perinæum."—*British Medical Journal*.

A NEW METHOD FOR EXSECTION OF THE ANKLE-JOINT.—The nature of the inflammatory disease making it necessary to resect this joint is such that all tissues involved must be thoroughly removed or good results cannot be expected. To carry out this essential a number of operations have been devised, but in every instance has the surgeon been compelled to divide structures that were indispensable to a good joint, or he has not opened the joint and exposed it to view fully.

Prof. F. Busch has lately devised a new method for operating which has been very satisfactory so far, and at the same time avoids all of the above mentioned embarrassments of the older operations.

The joint is opened without separating a single tendon. An incision is made extending from one malleolus to the other, passing under the foot instead of over the dorsum, as in most other operations. On the sides of the foot the incision extends only through the skin, while on the plantar surface it

must be carried down to the bone. The tendons are now carefully loosened from their attachments to the bones, and dislocated forward, without disturbing their relative position or the grooves in which they run. The next step is to saw through the calcaneum from below back toward the posterior ridge of the calcis; now the joint can be opened by flexing the foot. The synovial membrane, if diseased, can be removed in toto and the joint can be thoroughly inspected.

In a case referred to by the author, he removed the external malleolus, the calcis, and the entire synovial membrane; the wound was then thoroughly disinfected, the tendons replaced, and the cut surfaces brought together and held in position by silver sutures. The tendons showed no signs of displacement after the operation.—*St. Petersburg Med. Wochenschrift*.—*Cin. Lancet*.

PERFORATED FELT JACKET IN SPINAL CURVATURE.—A case at present under treatment, illustrates some of the advantages to be derived from the use of these jackets, combined with muscular exercise. The patient, a female child, aged 11, came under my care in August, 1882, suffering from considerable excursion in the dorsal region, for which she was wearing, at the time, a steel spinal support with arm crutches, by which her shoulders were being pushed almost up to her ears. A perforated felt jacket was made for me by Mr. Rorke, of North Street, Fitzroy Square, and instructions were given that she should exercise with the trapeze several times a day for a quarter of an hour at a time. Already in five months a decided improvement has taken place. The prominence in the back has diminished in size and elevation by half an inch, the shoulders are no longer pushed up to the ears, and the whole body has grown. The child can move her limbs with the greatest freedom, and much prefers the jacket to any instrument she has worn. Thus, in a most unpromising case, no resort to the surgical instrument maker is required beyond the first manufacture of the jacket, which can be softened and reapplied by the surgeon as often as necessary, and which is taken off by the mother once a fortnight for purposes of cleanliness, while necessary exercise is not interfered with. I notice that in a recent pamphlet by Mr. Noble Smith, felt jackets are spoken slightly of, and their porosity in particular is declared to be "a myth." However true this may be of the material originally used for these jackets, it is, I believe, a mistake in regard to the perforated felt, in which the pores are good sized holes perfectly visible to the naked eye. For efficiency, lightness and cheapness, these jackets leave, I venture to think, little to be desired.—H. N. HARDY, F.R.C.S.E., *Brit. Med. Jour.*

THE MEDICAL LANGUAGE OF ST. LUKE.—By

the Rev. William Kirk Hobart, I.L.D. The object of the volume before us is to prove from internal evidence that "The Gospel according to St. Luke" and "The Acts of the Apostles" were written by the same person, and that the writer was a medical man. The plan of the book may be briefly described, and we would take the opportunity of stating our belief that the mode of dealing with the subject is eminently scientific and, so far as we know, novel. All the words which are found only in the Third Gospel, or in "The Acts of the Apostles," or almost exclusively in these two books, are named, and quotations are given from Hippocrates, Galen, Areteus, and Dioscorides to show that the same words were in common use among medical writers to express the same meaning. The result of this study is certainly to prove beyond reasonable doubt that in the Third Gospel and in "The Acts of the Apostles" the descriptions of the miracles of healing were written by one who not only was familiar with the diseases in question, but who used such language as it would be unreasonable to suppose any one but a medical man could have had at his command; and, further, that in dealing with non-medical subjects he wrote in a style common in the Greek medical writers of the time, and one which a physician would be likely to employ. This peculiarity of phraseology being identical throughout the two books in question, leaves no doubt that they are the work of the same hand. A very interesting note is appended at the end of the volume, showing the probability that, in accompanying St. Paul on the three occasions referred to in the Acts of the Apostles, St. Luke was present as his medical adviser.—*Medical Times and Gazette*.

NAPHTHOL IN ITCH.—The *Med. Times and Gaz.*, February 3, 1883, says:—Introduced by Prof. Kaposi, of Vienna, naphthol has been substituted by him for tar in some affections of the skin, as eczema, psoriasis, prurigo, and especially itch. It has scarcely any odor, and even after long exposure to air only becomes of a pinkish color, which does not permanently stain the linen. Prof. Hardy, it is stated in a *thèse* by Dr. Guérin, has substituted a very simple formula for the complicated one of Kaposi, consisting in vaseline 100 parts to 10 parts of naphthol. The pulverized naphthol is dissolved in half its weight of ether, and is then mixed with a portion of the vaseline, and heated to 30° to 40° Cent., until the ether is entirely evaporated. The rest of the vaseline is then added, and the mass carefully triturated. The homogeneous pomade which is produced is kept secluded from the air. It may be applied at all periods of itch, whether complicated or not; and it is applicable also to the eruptions which supervene in the course of itch, and for which sulphur ointment is unsuited. The furrows are by this

ointment rapidly freed of their inhabitants, and other eruptions disappear. The treatment lasts from ten to fifteen days, which is very much longer than Prof. Hardy's rapid treatment by sulphur; but when we consider how long the itching persists often after the cure by sulphur—sometimes obstinately continuing for months—the treatment by naphthol is practically the shorter of the two. M. Guérin has never observed any ill effects upon the kidneys result from naphthol. — *Med. and Surg. Reporter*.

ERGOT IN THE RADICAL CURE OF HYDROCELE.—J. E. W. Walker, M.R.C.S.E., L.S.A., late H. M. 55th Regt., writes:—"In bringing this matter before the profession, I feel bound to admit that, but for a curious accidental circumstance, the agent might never have presented itself to my notice. In the year 1875, I proposed to operate upon a patient, aged 65, for the radical cure of hydrocele of the tunica vaginalis. The disease had existed for about ten years, and had been repeatedly emptied by other surgeons. At this time I removed, by the trocar and canula, about twelve ounces of serum, and, by accident, took from my pocket a bottle containing about two drachms of liquor ergotæ (Battley) in the place of the same quantity of tincture of iodine, which it was my intention to throw into the cavity. On my return home, I discovered the mistake, and watched the patient for some hours at intervals. No inflammatory state occurred, and there was entire absence of pain, so that I allowed my patient to return to his ordinary occupation the next morning. To the present time there has been no return of the abnormal secretion. I have since, on two occasions, used the same plan with perfect success, and I attribute the cure to a specific action, exerted by ergot, which re-establishes the balance between secretion and absorption."—*Brit. Med. Jour.*

CASTOR OIL AND GLYCERINE AS A PURGATIVE.—Dr. Soper, in the *Lancet* for Feb. 10th, says:—"After many months' experience, I now feel justified in bringing to your notice the great advantages of a combination of the above two drugs in equal proportions to act as a purgative. Glycerine has great therapeutic value, especially in its solvent properties, and this combination renders it especially valuable. In regard to castor oil, I think a great mistake has been made in the largeness of dose administered, and in this mixture only half a teaspoonful is required combined with an equal bulk of glycerine. In all cases of chronic constipation, hæmorrhoids, and anæmia, it has proved most useful. A scybalous motion is apparently emulsified, and is passed with the greatest ease. I have also given half-teaspoonful doses in the early stages of bronchitis, which seem to promote exudation from the tubes, and is certainly expectorant.

My great difficulty hitherto has been the obstinacy with which the mixture becomes a mixture, and it can only be made by placing the bottle in hot water and violently agitating.

ANTISEPTIC MIDWIFERY.—Strict antiseptic midwifery is practiced in the British Lying-in Hospital, according to the *British Medical Journal*. Each patient is delivered under a carbolic spray of one in sixty; she is twice daily syringed out with a two per cent. solution from the first day after labor. Every patient receives three times a day a mixture of ext ergotæ liq. gtt. x. tr. opii gtt., v.; quiniæ sulph., grs. ij.; acidi phosphor. dil. gtt., x.; aquæ, 3 i. According to the presence of any idiosyncrasy in the patient, this mixture is modified. In each ward of the hospital there is continually playing a carbolic spray of one in eighty. All washings of the genitalia are done with a one in sixty carbolic solution. The beds consist of horse-hair mattresses, on springs. Each ward contains four beds and is disinfected with burning sulphur, the floors being washed over with carbolic solution after three relays of four patients.—*Weekly Med. Review*.

TREATMENT OF ASTHMA.—Dr. William M. Welsh (*Medical Bulletin*) gives the following formula for the treatment of asthmatic attacks: R. Stramonii foliarum, 3 x.; potassæ nitratis, 3 v.; seminis foeniculi, 3 ss.; sacchari, 3 ij. M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve so as to get rid of the stems and coarser fragments. All the ingredients should then be rubbed together in a mortar without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head. It combines, the author claims, the good effects of nitre and stramonium.—*Am. Med. Digest*.

ADMINISTRATION OF ANÆSTHETICS.—The administration of an anæsthetic in a crowded amphitheatre is a piece of inhumanity to the patient. Experience has shown that a crowd of faces and the sight of the instruments about to be used—the horrible paraphernalia—greatly increase the danger of paralysis of the heart.—*Bartholow*.

GELSEMIUM.—Gelsemium is recommended in irritability of the nervous system with a determination to the brain, causing flushed face, contracted pupils, supra-orbital neuralgia, and is one of our best remedies. In hysterical spasms and in many cases of spermatorrhœa, it is very efficient.—*Chicago Medical Times*.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batellere, Paris.

TORONTO, MAY, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

CONTAGIOUSNESS OF CONSUMPTION.

A disease which continues to destroy its millions year by year "through the rolling ages," must be of absorbing interest to every thinking mind. Notwithstanding a general advance all along the lines, the cause and prevention of pulmonary consumption are still unknown quantities. Of late a good deal has been said about micro-organisms and tubercle bacilli as being the active agents in the origin and spread of this terrible enemy of our race, but proof of such being the case is lacking. The existence of bacilli cannot be accepted as proof of contagiousness. Even if it were true that these bacilli, are capable of developing the disease, it would be still necessary to show that they existed only by propagation, and never originated spontaneously. Were pulmonary consumption a contagious disease exclusively, it would be a preventable disease, and the discovery of such a fact would be hailed as the greatest boon ever conferred upon man. Unfortunately such does not appear to be the case. The theory is a pretty one, but it does not stand the test of experience. It is quite possible that this micro-organism and bacilli business is a little overdone as to its ultimate consequences. As before stated, the existence of bacilli afford no proof of the contagiousness of consumption. Far be it from us to make light of the work of investigators in this direction. On the contrary, we believe this new field is likely to yield results productive of great good. Let the cause of a given disease be known, and the chances are that it may be prevented, at least in many cases.

If not preventable, at all events, knowledge of its origin is likely to lead to a more rational mode of treatment.

Whatever may be said in favor of the theory of contagion by others, no such belief is entertained by those who have had large opportunities for observation in hospital practice. Amongst these may be mentioned Dr. Yeo, of King's Hospital, London, and Dr. Herbert Davies, consulting physician to the London Hospital, and to the Royal Hospital for Diseases of the chest. Dr. Yeo has published a book on the subject, in which he takes strong ground against the theory of contagion, for which he contends there is no reliable evidence. Dr. Yeo discusses Koch's demonstration of the "virus" of tubercle in the form of tubercle-bacillus, and the distinction between tuberculizing and non-tuberculizing processes of the disease. It is well known that consumption is a most virulent disease in Southern Europe, where it is regarded as contagious. The great prevalence of the disease in southernly countries, Dr. Yeo is disposed to attribute to the favorable influence exercised by heat in the propagation of the tubercle-bacillus. According to Koch the tubercle-bacillus requires a temperature above 86° Fah. for its propagation.

At first sight this may seem to clash with our experience in this northern climate, where the winter is the season most favorable to the development of the disease. So well is this known, that consumptives who can afford it are advised to go south early in the season. Cold, in the abstract, however, does not aid the development of the disease. That extreme cold does so indirectly, every one must acknowledge. To a diseased and broken down constitution cold is an extinguisher of the vital forces, consequently the sufferer is driven within doors, and thus is deprived of two most important elements of treatment, namely, exercise and pure air. He is confined within the narrow limits of a super-heated room by day, and too often made to breathe an atmosphere below the freezing point at night. No wonder then, that the disease grows apace as soon as winter sets in. Nor should it be thought anything strange, nor evidence of contagion, should others sharing the surroundings of the patient become victims of the disease. The greatest sanitary conundrum in cold climates is—How can we live so as to have both warmth and purity of air?

Dr. Davies gives the following facts regarding the attendants at Brompton Hospital for Diseases of the Chest: Dr. Edwards was resident physician for seventeen years. He remembers the case of fifty-nine medical assistants whose duration of office averaged six months. All but two are living, one dying from aneurism, and the other from some unknown disease. The present chaplain has held office for seventeen years, and his two predecessors are living. The matron has been resident for sixteen years, and the two former matrons are living. Of the nurses now in residence, one has been there 24 years; two, 12 years; one, 8 years; one, 7 years; one, 6½, and one 5 years. No under-nurse has died of phthisis. The head nurses sleep each in a room containing 50 patients, and two only are known to have died—one from apoplexy, and one some time after she had left the hospital, and after an unhappy married life, of phthisis. All but two of the physicians who have attended the in and out patients during seventeen years are living. One died from causes unknown, the other from causes unconnected with disease of the lungs. These, and similar facts, which come to us from other quarters, afford evidence about as conclusive as evidence can be, against the theory of contagion. It would appear that after all, as in the past so in the present, the question is not how to avoid infection, but how to ward off the disease in the predisposed, and how best to combat it when it once obtains a foothold?

A few practical lessons may be drawn from these facts. In the first place, it is a great mercy to those suffering from pulmonary consumption that the theorists have thus far failed to establish the contagiousness of the disease. Had it been otherwise it would have been necessary to treat them as lepers by isolating them from their fellows, which would have been a great hardship. There can be no question however of the great impropriety of close contact with the well, especially should occupancy of the same bedroom be rigidly avoided. Indeed all the sanitary regulations deemed needful in other diseases should be practised in this, both for the sake of the sick and the well. The statement that excessive heat favors the development of the disease, should be a standing warning against the close super-heated rooms in which, not only consumptives, but northern people generally spend the winter months.

THE BRITISH MEDICAL BILL.

The medical profession in Great Britain is to be congratulated in the near prospect of the passage of a most excellent Medical Act Amendment Bill. It has already passed the second reading in the House of Lords. Our British exchanges are almost unanimous in support of the measure, and regard it as a great reform. One of the principal features in the contemplated Amendment Bill is the establishment of Medical Boards, one for each part of the United Kingdom, for the purpose of holding examinations, and for such other purposes as are mentioned in the Act. In England fifteen persons, in Scotland eleven persons, and in Ireland eleven persons shall constitute the Boards respectively, to be chosen as follows:—In England, two by the University of London, two by Oxford, two by Cambridge, one by Durham, one by Victoria, (Manchester), three by the Royal College of Physicians, London, three by the Royal College of Surgeons, England, and one by the Apothecaries Society of London. In Scotland, three by the University of Edinburgh, two by the University of Glasgow, two by the University of Aberdeen, one by the University of St. Andrews, one by the College of Physicians, Edinburgh, one by the College of Surgeons, Edinburgh, and one by the Faculty of Physicians and Surgeons, Glasgow. In Ireland, two by the University of Dublin, two by the Royal University of Ireland, three by the King's and Queen's College of Physicians, three by the Royal College of Surgeons, and one by the Apothecaries Hall of Ireland. The Boards so chosen shall hold office for five years when a new election shall take place. The Medical Board of each part of the United Kingdom shall make regulations for holding final examinations for the admission of candidates to registration as medical practitioners, the nature and conduct of such examinations, the appointment of examiners, etc. The Bill also provides that no candidate shall be required to adopt or refrain from adopting the practice of any particular theory of medicine or surgery; women shall be admitted on precisely the same terms as men, and so far as practicable a uniformity of standard shall be aimed at in the final examinations held by the Medical Boards of the several parts of the United Kingdom.

For the purpose of exercising due control over

the Medical Boards, and for other purposes of the Act, a Medical Council shall be established, consisting of eighteen persons, six to be nominated by the Crown, two to be elected by the registered practitioners resident in England, one by the registered practitioners of Scotland, one by the registered practitioners of Ireland, four by the Medical Board of England, two by the Medical Board of Scotland, and two by the Medical Board of Ireland. The Medical Council shall be elected for a period of five years. The Medical Council shall, in addition to other duties imposed upon it by the Act, visit from time to time any examinations conducted, or recognized for the purpose of the Act, and enquire into the sufficiency thereof. The Medical Boards have power to regulate the course of medical education, subject to the control of the Medical Council, and approved by the Privy Council, for example, the preliminary examination of students, the course of studies to be pursued, the examinations to be passed, etc.

With reference to the management of the Register, we are pleased to observe that the Council is to have power not only to erase the name of any person convicted of felony or misdemeanor, but also to erase or suspend the name of any one who has been guilty of any infamous or disgraceful conduct in a professional respect, subject to an appeal to the Privy Council. This is a power which should be centred in all such governing bodies, and we hope some day to see this latter clause engrafted in our Ontario Medical Act. Such a measure is very much needed at the present time, to prevent some of our registered practitioners from prostituting their high calling to subserve the interests of the villainous quacks that infest the country.

As to the powers of Colonial Legislatures, the Bill provides that after the passing of the Act, any Colonial Legislature may make such regulations as it thinks fit with respect to the admission of registered medical practitioners under this Act, to practice in such colony, subject to this qualification, that any registered practitioner who at the date of such regulation being made, is entitled to practice in such colony, shall not be prevented from practicing by any such regulations. We would therefore draw the attention of graduates who purpose going to Great Britain to obtain qualifications to enable them to practice in Ontario upon registra-

tion, that this enactment will interfere with their programme.

The Act also provides for the registration in the British register, and the privileges of the same, without examination of such colonial qualifications as would entitle the holders to practice in the colony or colonies in which they were obtained, and such as may be recognized for the time being by the Medical Council for that purpose. -

ONTARIO BOARD OF HEALTH.

We have received the first annual report of the Board of Health of Ontario. It is divided into three parts. Part I., (the report proper) treats of the organization of the Board; the collection and dissemination of sanitary information; investigations into the causes of, and remedies for, various outbreaks of disease; action taken in relation to reported unsanitary conditions; collection of disease statistics; the relation of the Board to various classes, and the work to be done. Part II. consists of eight appendices, such as reports of commissioners instituted by the Board, and copies of documents, pamphlets, and circulars issued by the same. Part III. contains copies of the addresses, lectures and papers delivered by members of the Board or under its auspices. While the volume as a whole, contains a good deal of useful information, it displays a marked want of acuteness and tact in investigating and enquiring into the outbreaks of epidemics, especially of typhoid at Stratford and Lambton Mills. We are not informed of any efforts to trace the first source of the outbreaks,—to learn whence came the germs giving rise to the first cases. The prevailing unsanitary conditions which may be found almost everywhere, and which in accordance with present most generally approved authorities only afford ready facilities for the multiplication and spread of the disease germs, might easily enough have been described and the remedies suggested by any local physician, or even by an intelligent layman.

The daily *Globe*, in reviewing the report says, as if in sarcasm, "the only erratic part of the pamphlet is the 'errata' on the first page. Where they are not simply compositor's blunders that nobody could mistake, they are either useless or pedantic." We have only to say that the report as a whole is a crude "erratic" jumble, and is far from

creditable to its authors, especially when it is remembered that Wm. Oldright, M.A., M.D., Prof. of Italian, is at the head of the Board, and Dr. Bryce, M.A., at the foot, both graduates of Toronto University. The "errata" given on the first page, numerous as they are, might have been greatly extended. Even our city contemporary, the chairman's former advocate and supporter through good and evil report, has had to acknowledge in its April issue, the disjunctive and rambling nature of the report.

MEDICAL EXAMINATIONS.

We give below the names of the candidates who have successfully passed the primary and final examinations respectively of the various colleges and examining bodies in Canada, so far as we have had returns:

MCGILL UNIVERSITY, MONTREAL.—M. D., C. M.—Holmes *Gold Medallist*, C. E. Cameron; *Prizeman*, J. B. Loring; *Hon. Mention*, R. B. Struthers, J. S. Lathern, J. C. Bowser, J. Gray, G. Carruthers, J. J. Gardner, W. G. Henry, W. McE. Scott, J. R. Johnson; *Pass*, C. E. Allan, G. A. Gearden, C. B. H. Hanvey, H. J. Harrison, A. J. Hopkins, J. J. E. Maher, O. Martel, A. McLeod, A. MacNeill, J. W. MacLean, A. McDonald, F. S. Muckey, S. S. C. Phippen, W. K. Ross, A. J. Rutledge, W. H. Shaver, G. A. Sihler, A. Stewart, E. S. Wood.

Primary.—*Prizeman*, E. G. Wood; *Sutherland Gold Medallist*, R. F. Ruttan; *Hon. Mention*, W. A. Ferguson, J. H. Darey, F. G. Finley, H. E. Trapnell, H. T. Hurdman, T. A. D. Baird, F. N. Burrows, M. C. McGannon, F. M. Harkin; *Collection of Plants*, H. E. Trapnell; *Practical Anatomy*, F. G. Finley; *Pass*, J. H. B. Allan, R. H. Arthur, J. A. Barrett, G. A. Cassidy, W. D. Daly, D. W. Eberts, W. Groves, E. O. Hallett, A. E. Hanna, J. A. Hutchison, R. T. Irvine, C. H. Johnson, H. D. Johnson, J. H. Jolliffe, W. H. Klock, T. H. Landor, D. P. Merritt, N. McCormack, W. McClure, J. T. McKenzie, J. H. McLellan, D. L. McMillan, T. O'Brien, A. B. Osborne, James Park, F. H. Powell, A. M. Robertson, L. D. Ross, J. M. Scott, I. C. Sharp, J. L. Shibley, J. A. K. Wilson.

Botany Prize (first year), C. W. Wilson and J. A. Kinlock; *Practical Anatomy*, A. L. Howey; *Morbid Anatomy*, C. E. Gooding.

BISHOP'S UNIVERSITY.—M.D., C.M.—J. A. Caswell *Wood Gold Medallist*; E. Sirois, *Chancellor's Prize*; P. E. Minckler.

Primary.—E. E. Bronstorff (David Scholar-

ship); R. C. Blackner, C. B. Ball, and E. O'B. Frelich (Honors); P. E. Minckler and W. Patterson.

TRINITY UNIVERSITY.—M.D., C.M.—W. M. Brett, J. Urquhart, A. F. Pringle and T. W. Duncombe.

M.B.—Frank Krauss (*Gold Medallist*), B. H. Scott, J. A. Lea, J. E. Jenner, E. M. Hoople, L. Backus, S. W. Lamoreaux, F. H. Sawers, H. R. Casgrain, T. D. Meikle, T. H. Robinson, R. Hislop (*Honors*); S. W. McConochie, C. E. B. Duncombe, D. F. Rae, A. Hawk, J. H. McCullough, E. B. O'Reilly, W. F. Freeman, T. C. Cowan, W. F. Dickson, R. M. Fairchild, G. J. Charlesworth, A. G. Elliott, I. A. Thompson, and J. B. Gullen.

Primary.—Frank Krauss, J. Kennedy, C. W. S. Harrison, and C. A. McBride.

QUEEN'S UNIVERSITY.—M.D.C.M.—W. G. Anglin, C. Clancy, J. Cryan, L. Davis, H. M. Freeland, D. C. Hickey, J. F. Kidd, G. S. McGhie, A. McMurchy, T. A. Moore, T. A. Page, R. S. Smith, W. Young.

VICTORIA UNIVERSITY.—M.D.C.M.—J. M. Jackson, R. Hearn, A. D. Watson, H. S. Clerke, W. Cuthbertson, E. M. Hewish, J. S. Draper, S. S. Stewart, J. E. Case, W. Jaques, F. P. Drake, A. L. Brown, Augusta Stowe, C. S. Grafton, George Wyld, J. J. Wild, C. E. Cochrane, J. H. C. Willoughby, Wm. Kennedy.

Primary.—A. R. Harvie, T. W. Simpson, H. S. Martin, F. Hixon, W. A. Goodall, S. S. Wattam, J. O. Orr, J. A. Burgess, J. E. Ellis, J. H. C. Willoughby, J. Verner, S. M. Hay, G. G. Hutton, H. A. Wright, J. S. Freebourne, F. Beemer, B. B. Pattullo, A. T. Rice, C. W. Hunt, J. R. Phillips, D. D. Ellis, O. Grain, J. W. Campbell, Thomas Verner, J. Barber, Jos. Hord.

TRINITY MEDICAL SCHOOL.—*Fellowship Diploma*—J. E. Jenner (*Gold Medallist*), B. H. Scott, (*First Silver Medallist*), S. W. McConochie (*Second Silver Medallist*), T. H. Robinson, L. Backus, A. Hawk (*honors*); S. W. Lamoreaux, T. D. Meikle, R. Hislop, D. F. Rae, G. J. Dickson, J. H. McCullough, T. C. Cowan, C. E. B. Duncombe, R. M. Fairchild, I. A. Thompson, and G. J. Charlesworth.

Primary.—J. R. Logan (*Scholarship & Mat. Med. Prize*), W. M. Brown (*Baptist Prize in Chemistry*), H. H. Hawley, S. H. Mott, C. F. Snellgrove, P. A. Dewar, S. A. McKeague, and Robert Ovens (*First-class honors*); G. A. Bingham, D. O. R. Jones, F. Campbell, W. H. Pepler, G. L. Airth, T. Ovens, J. M. Cochran, W. E. Sprague, G. J. Paul, T. McCullough, A. B. Wilson, G. Fierheller, J. Lindsay, H. D. Leitch, A. T. Little, and R. J. Lockhart (*Second-class honors*); P. H. Salter, J. S. McCullough, J. E. W. Anderson, T. M. Lawton,

J. A. Couch, J. Park, C. J. McIntyre, J. C. Bell, J. Johnston, A. Gillespie, J. E. Brown, A. V. Delaporte, W. J. Chambers, D. W. Carmichael, A. E. Stuart, A. McKillop, C. Trow. Several others passed on certain subjects.

First-year Scholarships.—S. Scott (*First Scholarship*), R. Lucy (*Second Scholarship*). 53 candidates passed the first year's examination.

TORONTO SCHOOL OF MEDICINE.—*Fourth year*.—W. J. Robinson, (Scholarship); J. M. Jackson, (Honors).

Third year.—R. Hearn, (Scholarship); J. W. Clerke (Honors).

Second year.—L. Carr, (Scholarship); H. Bascom, J. H. Howell, (Honors); J. G. Sutherland, G. A. Carveth, W. A. Goodell, J. S. Freebourn, J. R. Harvie, C. W. Hunt, A. C. Krick, and D. Ellis.

First year.—D. R. Johnston, (Scholarship). 39 candidates passed the first year's examination.

COLLEGE OF PHYSICIANS AND SURGEONS, ONT.—*Final for License*.—Anglin, W. G., Bates, F. D., Belt, R. W., Bell, W. D. M., Bray, J., Collver, M. K., Casgrain, H. R., Clerke, H. S., Case, T. E., Carleton, W. H., Chafee, C. W., Cryan, J., Cuthbertson, W., Derby, W. J., Drake, F. P., Dickson, W. F., Emory, W. J. H., Freeman, W. F., Fairchild, R. M., Frost, R. S., Gullen, J. B., Gordon, C. M., Hansler, J. E., Hearn, R., Hislop, R., Hickey, D. C., Jackson, J. M., Jaques, W., Kidd, J. F., Krauss, F., Lepper, W. J., Meikle, T. D., Meldrum, J. A., McConochie, S. W., McMurchy, A., O'Reilly, E. B., Rattray, J. C., Ross, W. A., Robinson, T. H., Robinson, W. J., Spilsbury, E. A., Stowe, Augusta, Sawers, F. H., Wilson, J. D., Whitely, J. B., Woods, E. R., Ray, J. W.

Primary.—Bell, W. D. M., Bingham, G. A., Burgess, J. A., Beemer, F., Beatty Elizabeth, Brown, W. M., Carveth, G. A., Couch, J. A., Courtenay, J. D., Cane, F. A., Cherry, G. A., Cochrane, J. M., Clerke, H. S., Case, T. E., Chafee, C. W., Derby, W. J., Dewar, P. A., Draper, J. S., Duff, H. R., Elliott, J. E., Everts, D. W., Eede, T. E., Emory, W. J. H., Fairchild, R. M., Fergusson, J., Fierheller, G., Goodall, W. A., Gunne, W. J., Gordon, C. M., Hawley, H. H., Hixon, E. F., Harvie, A. R., Howell, J. H., Hunt, C. W., Herald, J., Hauks, A. R., Harkin, Fred., Hall, E. A., Harrison, W. S., Hislop, R., Hickey, D. C., Johnston, G. L., Jones, D. O. R., Johnston, F. H., Kinsely, A. B., Krick, C. A., Knight, J. H., Krauss, F., Leitch, H. D., Lake, A. D., Lockhart, R. J., Logan, J. R., Murray, T. W., Martin, H. S., Minchin, D., McGillivray, Alice, McGannon, M. C., Ovens, T., Orr, J. O., Paul, J. J., Phillips, J. R., Patterson, J. W., Palmer, G. F., Robertson, W. N., Ruttan, R. F., Rattray, J. C., Stewart, R. L., Stewart, S., Suther-

land, J. G., Smith, Elizabeth, Sterling, J. E., Trow, C., Webster, H. E., Wilson, A. B., Watson, J. A., Wattam, G. S.

THE HIGHER EDUCATION OF WOMEN.—The *Medical and Surgical Reporter*, Philadelphia, gives the following on this subject in an editorial of recent date:—"We trust that we will be pardoned (for we mean no disrespect whatever) when we say that it is not the true womanly woman, but rather the masculine woman, who hankers after this higher education. We are speaking in all sincerity, from a scientific standpoint, and mean no disrespect to any one.

We clearly recognize two distinct types of woman-hood, between which all degrees of each are to be found. On the one hand, the timid, confiding, trusting woman, who, after completing her school or convent education, soon comes to realize that her mission in this world is a domestic one, with all the mingled trials and pleasures which that word implies. On the other hand, we see the self-confident, self-asserting, self-reliant, fearless, masculine woman, who feels irresistibly impelled to push forward into the realms of science, and for whom the domestic duties have but a secondary attraction. These two types are both admirable; the one lovable, the other grand and noble. The first never gives a thought to the "higher education of women;" the second desires and demands it. Let her have it. If she be capable, she will make her mark; if she be not, Darwin's beautiful law will come into play, and she will disappear.

In a word, the number of women who demand scientific education are comparatively few; they possess many masculine characteristics, and are entitled to masculine privileges. If you give them the chance they may, perhaps, fulfil their earthly mission; if you deny them, you do them an injustice, by refusing a request the granting of which could do them no harm. Therefore again we say, grant their request."

HOSPITAL APPLICANTS.—Dr. Canniff desires to say for the information and guidance of the profession of Toronto, who wish to obtain the admittance of any one to the hospital, that according to the by-law defining his duties he has to examine all applicants. It is therefore unnecessary to give a certificate of disease except in cases of internal ailments, such as uterine diseases, also in cases

of eye and ear affections. But it is necessary for the applicant to furnish a certificate of indigency and of having lived in Toronto, and if the physician likes to give this, it will save the applicant the trouble of seeking it elsewhere. He is at his office, City Hall, every day from 10 to 12 and from 3 to 4, Saturdays from 10 to 12, where applications must be made. He cannot carry the order book away to his house, and begs to be spared the necessity of requesting persons who come to his house to call at the office. He has to spend no little time in visiting applicants who often live in the outskirts of the city.

UNPROFESSIONAL.—A correspondent from Newcastle sends us a letter, too late for insertion under its proper head, complaining of unprofessional conduct on the part of a confrère. The complainant states that in a certain case he had amputated a portion of the foot, and the physician alluded to made a visit to the patient without complainant's knowledge and during his absence, and gave his opinion on the case. The complainant also states that this is not the first time his confrère has interfered in this way. It is wholly unnecessary to say that such conduct is decidedly unprofessional, and we cannot but think there must have been some mitigating circumstance in the case. Medical practitioners cannot be too careful in refraining from making friendly visits to patients under the care of other physicians. We have known a good deal of ill feeling caused by such visits, even where there was every intention to avoid answering any questions, or expressing any opinion in regard to the case.

MINISTER OF AGRICULTURE.—It is rumoured that Dr. Orton, M.P., for Wellington, Ontario, is likely to receive the appointment of Minister of Agriculture. We hope the rumour may prove well-founded, as the position of Minister of Agriculture is one of great importance, and specially adapted for a medical man, inasmuch as it has to do not only with agriculture, but also with vital statistics, immigration, quarantine, exportation and importation of live stock, etc., etc. As Dr. Tupper is about leaving the Cabinet, a more favourable opportunity cannot occur for the appointment of a medical man, and we know of no one better qualified from length of service and experience in parliamentary matters than Dr. Orton.

HORSFORD'S ACID PHOSPHATE IN SEA-SICKNESS.—The use of this remedy in sea-sickness has been specially recommended by many eminent physicians. Dr. Adolph Ott, member of International Jury at the World's Exhibition in Vienna, used the acid phosphate for sea-sickness, among the passengers, during a passage across the Atlantic, and said: "In the plurality of cases, I saw the violent symptoms yield, which characterize that disease, and give way to a healthful action of the functions impaired. I was rather surprised to find it a remedy for sea-sickness, but as there can be no longer any doubt of the fact, I think that the widest circulation should be given to it."

APPOINTMENTS.—Dr. F. W. Campbell has been appointed Dean, and Dr. R. A. Kennedy Registrar, of the Medical Faculty of the University of Bishop's College, Montreal.—W. H. Snow, M.D., of Hamilton, Ont., late House Physician at Bellevue Hospital, has been appointed First Assistant to the Chair of Gynæcology, and Instructor in Clinical Gynæcology, at the Medical Department of the University, City of New York.—It is rumored that the following changes are to take place in the teaching staff of the Kingston Medical College: Dr. Saunders to be appointed Professor of Clinical Surgery, Dr. McCammon Professor of Clinical Medicine, and Dr. W. H. Henderson Professor of Histology and Curator of the Museum.—Dr. F. D. Canfield has been appointed Assistant Surgeon to the Algoma Division of the C. P. R.

Dr. E. S. Wood, (McGill), has been appointed assistant surgeon on one of the sections of the C. P. R. British Columbia.

Dr. W. R. Sutherland has been appointed Assistant Demonstrator of Anatomy in McGill Medical College, Montreal.

MEDICAL COLLEGE FOR WOMEN.—The establishment of a Medical College for Women is about to be accomplished. The sum of ten thousand dollars has been promised toward its endowment by Dr. Jenny K. Trout of this city. This amount with whatever sums may be added, is to be vested in a Board of Trustees. Dr. Barrett's name is mentioned as the President of the Faculty. The establishment of such an institution will settle the vexed question of co-education of the sexes in medicine, in a way which cannot but be satisfactory to the medical colleges.

OBITUARIES. — Surgeon-General J. K. Barnes, U. S. A., died in Washington on the 5th ult., aged 66 years.

The death of Dr. VanBuren of New York at the age of 64 years is announced in our exchanges.

Prof. Rinecker, of Wurtzburg, has recently died at the age of 72 years.

William Farr, M.D., F.R.S., for many years compiler of abstracts in the Registrar-General's Office, London, Eng., died on the 16th ult., aged 76 years.

Prof. Von. Bruns, of Tübingen has also paid the last debt of nature.

John Brown, the Queen's faithful personal attendant, died after an illness of three days of erysipelas of the face.

BANQUET TO OLIVER WENDELL HOLMES.—The medical profession of New York has honored itself by giving a banquet in honor of Dr. Oliver Wendell Holmes, upon his retirement from active medical teaching. It was a fitting tribute to the genius of a fellow-member, and was as successful as it was appropriate. Dr. Holmes read a poem on the occasion which showed the old-time force and beauty, concluding with the following stanza :

“ Deal with him as a truant, if you will,
But claim him, keep him, call him brother still.”

QUEBEC HEALTH ACT.—Our sister Province has been moving in the direction of the establishment of a Board of Health somewhat similar in its provisions to the one now in force in Ontario. The Board is to be composed of three medical men, three commissioners, and a sanitary engineer. Dr. Larocque and other members of the profession in Montreal, have taken an active interest in its promotion.

REMOVALS.—Dr. R. N. Garrett, of Barriefield, has removed to Kingston, Ont.

Dr. Ecroyd of Mount Forest, Ont., has removed to Detroit, Mich. Dr. Elliott, of Iroquois, Ont., has removed to Lindsay. Dr. Bowerman of Picton, Ont., has removed to Brooklyn, N.Y. Dr. L. Sinclair has returned from Winnipeg to Walkerton, Ont. Dr. Belt, has removed from Burlington to Brussels, Ont. Dr. McAlpine has removed from Tignish to Crapaud, P.E.I.

The summer sessions in Trinity and Toronto Schools open on the 1st May with good classes.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the Board of Governors of the above-named College, will be held in Montreal on the 9th inst. The preliminary examination for admission to the study of medicine, takes place on the 3rd inst. The secretaries are, Drs. F. W. Campbell, Montreal, and A. G. Belleau, Quebec, to whom all applications should be made.

RESIGNATION OF PROF. WRIGHT.—Dr. Wright has resigned the chair of Materia Medica and Therapeutics in McGill Medical College, Montreal. He has also resigned his position on the Surgical Staff of the Montreal General Hospital. We understand there are several candidates for these vacancies.

The friends of Dr. McLean, of Ann Arbor, will be pleased to learn that he has been successful in his action for libel against the *Detroit Evening News*. He has recovered damages to the amount of \$20,000. On his return after the trial he received an ovation from the citizens of Ann Arbor, Mich.

We regret to learn that Dr. Scott, Prof. of Anatomy in McGill College, Montreal, is indisposed, and trust that the nature of his disease may not be as serious as apprehended by his physicians. He is believed to be suffering from disease of the kidneys.

Several of our city confrères will visit Europe during the coming summer. Drs. Winstanley, Ogden, and Teskey have already taken their departure, and Dr. McCollum and others are expected soon to follow.

HEALTH OFFICERS.—D. C. Allan, M.D., and W. C. Bliss, M.D., have been appointed members of the Board of Health in district No. —, County Cumberland, N.S.

CANADIANS ABROAD.—H. H. Graham, M.D., of Trinity Medical College, Toronto, has passed the primary examination of the Royal College of Surgeons, Eng.

Dr. W. Gardner, of McGill College, Montreal, has given up general practice, and will in future make a specialty of diseases of women.

CORONER.—J. A. Morse, M.D., of Ohio, has been appointed Coroner for the County of Yarmouth, N. S.

Books and Pamphlets.

UNTOWARD EFFECTS OF DRUGS. By Dr. Lewin, Docent of Materia Medica, University of Berlin. Translated from the German by J. J. Mulheron, M.D. Detroit: Geo. S. Davis.

Very few practitioners of medicine, of any long standing, can have failed occasionally, or, indeed, too frequently, to realize the unpleasant occurrence of the "*untoward effects of drugs*," and to have the painful experience that the patients and their friends rush to the conclusion that the real cause of these "effects" has been the ignorance or the negligence of the doctor, although they know very well that both in their bodily and mental constitution men and women evince very palpable peculiarities, which, in some instances, might almost tempt to the belief that nature had framed them in one of her sportive moods, or, as Shakespeare has it, that some of her "journeymen had made them, and not made them well."

No diligent student of therapeutics will, of course, be unaware of the diversity of results which should be apprehended from the action of drugs in different subjects, whether owing to difference of age, of sex, of organization, of prior morbid influences, or, finally, latent and undetected idiosyncrasy; yet, notwithstanding this general competency, he may find it very useful, and certainly very contributive to economy of his time, to find reduced into a limited space information which he otherwise might have to hunt for in numerous ponderous volumes, and even then might not discover what he required.

In this octavo of 216 pages, he will probably find, in condensed and clear form, the best of all that is known on the subject of untoward drug-action, as well as on the remedial measures best suited to its removal or suppression. Certainly, if he does not find what he seeks for, he should not hastily blame Dr. Lewin, whose medical erudition we might almost regard as a bulimic bibliomania. The list of authorities quoted by him is no less than 440. This amount of reading, in a fractional department of medical science, to any other than a German writer would be an almost unapproachable enterprise. What a blessed boon then to us to find the fruits of Dr. Lewin's patient research gathered into such limited bounds. The number of the drugs treated of by him is over 220, in which are included all the most active and valuable now in use. It is no derogation from the general merits of the work to say that the introduction, which covers 26 pages, is the best of it, and that no reader, however erudite or experienced, will rise from its perusal without being both pleased and instructed. We had marked for citation a number

of passages which appeared to us indicative of the solid practical sense of the author, but our available space forbids this indulgence.

MEDICAL DIAGNOSIS: A MANUAL OF CLINICAL METHODS. By J. Graham Brown, M.D. Edinburgh: Bell & Bradfute. Toronto: Carswell & Co.

This book treats of signs and symptoms of disease, with the view of aiding the student and practitioner in diagnosis. It contains a great deal that is valuable and which requires to be known by those at all grounded in the theory and practice of medicine. While the various causes giving rise to certain symptoms are dwelt on, yet as an aid to differential diagnosis, the work is in our estimation defective, for diseases which somewhat, or very greatly resemble, and may therefore, by the inexperienced, be mistaken for one another, might have had their respective symptoms tabulated, showing the points of similarity and of difference, and thus, in small compass, invaluable aid might have been given. Much information, and that of the latest, is found in this little book in regard to heart sounds, the cardiograph, the sphygmograph, and the physical signs found in various thoracic diseases. A very good chapter is given on skin affections, short, but giving a great deal of information in small compass. The urinary, the reproductive system, and the nervous system are also dealt with. The value of the book appears to us, to lie in the great number of points noticed, on whatever is treated of; the defect that the information given, is not so arranged, as to be used to the best advantage.

ON CERTAIN PARASITES IN THE BLOOD OF THE FROG; ALSO, ON CANADIAN FRESH-WATER POLYZOA. By William Osler, M.D., Montreal, Que.

Births, Marriages and Deaths.

In London, Eng., on the 28th of March, James F. Cattermole, M.D., to Alice Elizabeth, daughter of John Doherty, Esq., Longfield, Kent.

In this city on the 28th ult., Dr. J. A. Stevenson, of London, Ont., aged 32 years.

On the 25th ult., Joseph Allen Whyte, M.D., of Montreal, aged 40 years.

On the 24th ult., Dr. B. H. Leprohon, of Montreal, aged 68 years.

On the 12th ult., Dr. Jonathan Woolverton, of Grimsby, aged 73 years.

On the 6th ult., Dr. McIver, of Pembroke, Ont., aged 85 years.

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Original Communications.

TREATMENT OF DIPHTHERIA BY COLD WATER.*

BY A. WORTHINGTON, M.D., CLINTON, ONT.

Mr. President and Gentlemen,—The treatment of diphtheria is a subject on which there is much difference of opinion in the profession, and I may say at the outset that in many respects I have departed from the course usually pursued. The fatality of this disease is so great that any reasonable suggestion as to treatment ought not to be rejected without due consideration. Among over twenty authors whose treatment I have carefully read, no one of them (Prof. Jacobi excepted) mentions the application of cold to any part of the surface. My reason for using cold water (and ice if necessary) in the treatment of diphtheria, is that I have for 27 years used it successfully in the treatment of all forms of scarlatina, and saw no reason why it would not be equally useful in controlling the temperature in diphtheria, and I have not been disappointed. In the following cases I adopted the cold water treatment in addition to other means.

CASE 1.—I was called, on the 7th November, 1881, in great haste, to see J. M. W.—, aged upwards of three years, his father saying that he was dying with croup, and exhibited great distress. I may mention here that only two weeks before they had lost a fine boy of six years with what was supposed to be croup.

Previous history.—Has been quite healthy till within the last four or five days. Some white spots were then noticed on his tonsils, and a cold, wet cloth was applied to the throat, after which he seemed better. At noon on the day previous to my visit he was noticed to cough, and also in the

afternoon. They gave him a vapor bath, and applied cloths wrung out of hot water to his throat and chest, and repeated them till noon the next day, and gave him a decoction of bloodroot in vinegar.

Present condition.—Is very dull and takes very little notice of anything; his cough is hoarse but not croupy, and he appears exhausted. 2 p.m.—Pulse 130, temp. $102\frac{1}{2}$ F., resp. 36. The soft palate and tonsils and as far down as could be seen, were covered with diphtheritic deposit, but there was not yet sufficient invasion of the larynx to interfere seriously with respiration. The breathing was that of exhaustion, but there was no dyspnoea. Prescribed $\frac{1}{8}$ drop doses of ext. of aconite every half hour for four hours, without benefit; then changed to quinia sulph. gr. j. every two hours, and to have brandy and milk freely. Pulse came down to 116, temp. 101 F., resp. 36 and greatly laboured. The improvement was only temporary, and he died at 8 a.m. the next morning, 20 hours from the time I first saw him and 46 hours after the attack was first noticed to be serious.

The termination of this case was rapid, but I think there can be no reasonable doubt that the zymotic action of the poison was materially increased by the hot applications. Had his temperature been taken in the first of the attack, and the throat examined, and the proper treatment given by a physician, there is little doubt but he would have been saved.

CASE 2.—On the following morning, 7 a.m., while case 1 was dying, my attention was called to his brother, T. R. W., aged 10 years. Examination of the throat revealed a small diphtheritic deposit on the left tonsil. The whole arch and pharynx were much inflamed, and he was giddy on attempting to walk. Pulse 120, temp. 103 F., resp. 28. Prescribed $\frac{1}{4}$ m. fl. ext. aconite every hour, and throat to be washed with acid carbol. 1 to 60 every two hours. 2.15 p.m.—Pulse 126, temp. 104 $\frac{1}{2}$, resp. 32. Changed the treatment to the following prescription:—

R Pot. chlor. 3 ij.
Syrup limonis 3 j.
Aqua 3 iiij. M.

A dessert-spoonful to be given every two hours; and quinia sulph. gr. i. in same time. Abundant nourishment to be given. Tepid sponging was

*Read before the Ontario Medical Association, Jun. 1882.

ordered at first, but I said to his mother that the disease was gaining ground so fast that I feared a fatal result if cold water was not used to control the temperature. She at once assented, and a cold, wet cloth, large enough to cover the entire body, was wrapped around him, to be changed every half hour for a fresh one, and covered with dry flannel. A wide bread and water poultice to be put three-fourths round the neck and changed as soon as it became at all warm. 4 p.m.—Pulse 120, temp. 103 $\frac{3}{4}$, resp. 28; feels much better.

November 9th, 9.30 a.m.—Pulse 112, temp. 99 $\frac{1}{2}$, resp. 24. The patch of false membrane, which had enlarged considerably yesterday, is now nearly gone; fauces still very red; the coating on the tongue, which was thin and white, had rapidly become thick, dark and dry, but is now moist; has been sweating all night and is moist all over. 8.15 p.m.—Pulse 104, temp. 99 $\frac{3}{4}$, resp. 20. Is in every way better; throat quite clean. To continue treatment at longer intervals at discretion. Nov. 14th, was again called. 7 p.m.—Pulse 90, temp. 100. The membranous deposit began again last evening with a general increase of all the symptoms. At 3.30 a.m. to-day his mother noticed a patch of membrane, the size of a pea, which had increased by 12 m. to the size of a ten cent piece. Frequent washings with carbolic acid had taken it all away but a little on the left tonsil where the exudation first appeared. Prescribed the following:

R Pot. chlor.....3 ij.
Tr. ferri chlor.....3 ij.
Syrup simp.3 iv. M.

Dose.—A teaspoonful every four hours, and quinia sulph. gr. i. every four hours, to alternate. His convalescence from this was gradual.

CASE 3.—C. M. McG—, aged about four years. Was telegraphed for on the 15th Nov., 1881. Has been quite healthy up to the present. She is pale and has a somewhat anxious expression, and is quite hoarse when coughing or speaking. There is considerable inflammation of the fauces and pharynx, but no fibrinous deposit. Pulse 126, temp. 100 $\frac{3}{4}$, resp. 33; no lung difficulty. Prescribed the following:

R Pot. chlor.....3 ij.
Tr. ferri chlor.....3 ij.
Syrup simp.3 iv. M.

Dose.—A teaspoonful every four hours and car-

bolic acid wash to be used every four hours alternately with the medicine.

November 19th.—Telegraphed for again; patient worse; fibrinous patches on both tonsils. 12 m.—Pulse 130, temp. 101 $\frac{3}{4}$, resp. 36. There is almost complete aphonia. To have above dose every two hours with quinia sulph. gr. $\frac{1}{2}$ in same time, alternately. New milk to be given from the first as freely as she would take it. Cold water to be applied as heretofore directed. 2.30 p.m.—Pulse 120, temp. 101 $\frac{1}{4}$. To continue same treatment. 20th, 12 m.—Pulse 112, temp. 98 $\frac{3}{4}$, resp. 22. Appearance of fauces better, and pseudo membrane nearly all disappeared. There is a possibly increased hoarseness. 3.30 p.m.—Pulse 100, temp. 98 $\frac{3}{4}$, resp. 22. Is much better, except the laryngeal trouble. Same treatment to be continued. 21st, 12 m.—Pulse 116, temp. 98 $\frac{3}{4}$, resp. 24. Passed an uncomfortable night; diphtheritic patches have disappeared; larynx more affected, but the cough is loose. 4.30 p.m.—Pulse 136, temp. 101 $\frac{1}{4}$, resp. 32. 7 p.m.—Pulse 150, temp. 102, resp. 32. Ordered thorough application of cold to throat and trunk. Continue same treatment, and to have two grs. quinine every two hours, and brandy and milk at same time. 22nd, 11 a.m.—Pulse 135, temp. 101 $\frac{3}{4}$, resp. 36. Passed a very bad night; had a high fever; was very sore and did not care to be moved; cough dry and tight, and quite a ring to it. Ordered the cold water more thoroughly applied to the throat and trunk. Lactic acid spray was commenced yesterday, a sort of hood having been formed over the patient's head to retain the spray from the steam atomizer. 10.30 p.m.—Pulse 116, temp. 99 $\frac{1}{2}$, resp. 24. Is very much better, though there is a good deal of hoarseness when sleeping. 23rd, 8.45 a.m. Pulse 120, temp. 99 $\frac{3}{4}$, resp. 30. Passed a good night, sleeping the most of the time; pseudo-membrane has appeared again on both tonsils. 9.30 p.m.—Pulse 98, temp. not taken, resp. 26. Appears better; has had no fever since morning; patches darker and mucous membranes clearing; the laryngeal trouble seems better, the hoarseness being slightly loose; the left submaxillary gland is enlarged and tender and the tissue around swollen. She is sleeping soundly, with a loose rattle in the larynx. 24th, 9.30 a.m.—Pulse 90, temp. 97 $\frac{1}{4}$, resp. 23. She has slept the most of the night. Continue quinine and change former prescription to the following:

R Pot. chlor..... 3 ij.
 Syrup limon 3 j.
 Aqua..... 5 iij. M.

A teaspoonful every four hours, and the throat to be washed every hour with carbolic acid 1 to 60. Is much better and has recovered her voice. 8.30 p.m., pulse 80, temp. 96½, resp. 22. The cold water treatment has evidently been continued a little too long; had all the wet things removed and replaced with dry warm flannel. 10.40 p.m., pulse 82, temp. 96½; had bottles of hot water placed around her and hot flannels around her limbs; is sleeping very quietly and does not cough. 25th, 6 a.m., pulse 84, temp. 96½, resp. 24; directed a linseed-meal poultice with mustard on the throat. 7.30 p.m., pulse 90, temp. 96½, resp. 26; is lively and seems much better; arms and legs quite cool, body warmer. She complains of nothing. Still some pseudo-membrane to be seen; to stop the pot. chlor. and use the tr. ferri. with quinine and simple syrup; continued the brandy and nourishment freely, also the hot flannels and bottles of hot water.

26th, 1.30 p.m., pulse 86, temp. 97½, resp. 24; passed a good night, but it is still difficult for her to articulate on account of the laryngeal trouble. The diphtheritic deposit has disappeared. To continue the medicine and use the lactic acid spray again for a time. She recovered slowly from this time.

Remarks—Laryngeal diphtheria as a rule is fatal, and case three appears to have been laryngeal in character but probably not severe; the stage of incubation was at least four or five days, giving ample time for thorough blood poisoning. Of the three forms this case appears to have been "diphtheritic," (the other two forms being "croupous" and "necrotic"). A fatal termination, I think, might have been looked for with certainty but for the cold water, as on the 21st and 22nd the disease was making progress just in proportion to the non-thoroughness of its application. A crisis came somewhat unexpectedly, and the cold water was possibly continued longer than was necessary. The vocal cords are said not to be affected as a rule although the primary breeding place of this and other gerin diseases, but not necessarily more serious though requiring much more time for convalescence.

Conclusions.—1st. The treatment of diphtheria must be begun with the invasion of the disease to secure any safety to the patient—not a moment's time should be lost. 2nd. The cold water applications should be made on the first appearance of a rise in temperature, and its continuance governed by the tendency of the extremities to become cool. 3rd. The most careful attention should be given to the nourishing of the patient from the first. 4th. Adynamic symptoms should be anticipated by the free use of stimulants and tonics, and the application of artificial heat if necessary.

THE DISEASE OF A DISEASE.

BY EDWARD PLAYTER, M.D., TORONTO.

The belief is maintained by many observers that almost all, if not all diseases, excepting those of a traumatic character or arising from violence, are caused either by want of some one or more of the normal essential ingredients or nutrient elements of the blood, or the presence in the circulating fluids of some substance or substances of an abnormal or extraneous character. In theory it seems plausible, and in practice we are called upon to treat nearly all diseases upon one or other of these propositions. By far the larger proportion of diseases, and indeed nearly all those of a serious or malignant character, arise from the last-named condition—that of foreign, more or less poisonous, matters in the system, and most of these matters, we have now good reason to believe, are living organisms. The parasitic nature of the various "fevers" is almost universally acknowledged, and it seems not improbable that many morbid processes now regarded as true inflammations, may yet be found to have a parasitic origin, or to have their starting-point in some form of obstruction by foreign matter.

With a view to more successful treatment—prevention and cure,—of disease, investigators are laboring toward determining the relations of such foreign matters, especially living organisms, to pathological processes and conditions, and herein is a large field for investigation. We now have a fair knowledge of the way in which some of the parasites produce disease. The *tænia* do so by consuming nutritive matter which ought to go to the sustenance of the body; and such as the *echi-*

nococcus, it appears, simply by their presence in such delicate organs as the eye and the heart. The trichinæ create general irritation and a febrile condition by their migrations from the intestines to the muscles and in the muscles. In the case of the microscopic parasites of the septic process, it is probable that the oxidation which is essential to the processes of their growth and multiplication, and the consequent heat thereby developed in the body, gives rise to the fever and intestinal irritation with which their presence in the body is accompanied. Regarding the peculiar way in which the more specific organisms of such constitutional diseases as tuberculosis, syphilis and leprosy produce the morbid processes associated with them, we know but little.

In referring to investigations such as above mentioned, the *Medical Times and Gazette* (London), intimates that in such attempts there has been probably far too little disposition to take advantage of well ascertained facts respecting the life, history and mode of pathological action of the larger animal parasites, and the analogy of these promises now to supply a valuable link in tracing the relation of organisms to disease. During the last few years, Dr. Patrick Manson has been making investigations into the filaria disease and several of his articles on it have been published in the *China Customs Gazette* and re-published in the *Medical Times and Gazette*. He has shown that "there could be no reasonable doubt that the *filaria sanguinis hominis* was associated with certain 'lymph diseases', such as chyluria, lymph-scrotum, and other forms of elephantiasis; but it was equally certain that in the majority of instances of filaria disease no lymph disease was to be found." In the words of Dr. Manson, "there is abundant evidence that *filaria sanguinis hominis* does not always, or even generally, give rise to disease. As a rule, parasite and host live together for years in perfect harmony."

It has been shown by Dr. Manson, in papers published during the last few years in the *Medical Times and Gazette*, that the *filaria sanguinis hominis* which infests the blood is the embryo form of a parent worm, 250 times larger, which inhabits the lymphatic vessels; and in every instance of filaria in the blood there must be a parent filaria in some part of the lymphatic system. But evidence of the presence of the parent, in the form of

lymph disease, is the exception and not the rule. It follows, therefore, that it is only in special conditions that the parent gives rise to chyluria or elephantiasis. What are these conditions? "What is the link between the mature parasite and elephantiasis? How comes it that in but one subject out of many, serious disease is the result of the presence of such a tenant"? Dr. Manson has shown that it is because the parent worm, whilst naturally viviparous, occasionally aborts, and that the ova give rise to the lymph disease. He has now found two cases in which abortion had occurred, and refers to them as follows:

"Here, then, are two cases in which the ova of the parasite were found in the lymphatics. It is evident that my first case was not exceptional. Occasionally, ova *are* passed into the lymphatics. Like other animals, therefore, the parent filaria is liable to miscarry. This, at first sight, would appear to be a matter of little importance, but reflection will show that this is by no means the case. The accident is fraught with danger, and is, in fact, the cause of the elephantoid diseases, and the key to their intimate pathology.

"In the instances in which the parent worm has been discovered, she was found in lymphatic vessels on the distal side of the glands. This has been shown to be in many, if not in all, cases her normal habitat. Her progeny, therefore, must travel along the afferent vessels, through the glands, and so on to the thoracic duct, and thence into the blood. The long, sinuous, and powerful body of the embryo is well adapted to perform this journey. But suppose, instead of this mature embryo, an ovum is launched into the lymph-stream prematurely, and before the contained embryo has sufficiently extended its chorion, then this passive ovum must certainly be arrested at the first lymphatic gland to which it is carried by the advancing lymph-current. It measures $\frac{1}{16}$ " \times $\frac{1}{32}$ ", whereas the outstretched embryo is only about $\frac{1}{32}$ " in diameter. It is much too large to pass the glands; and the embryo, rolled up in its chorionic envelope, cannot aid itself. It becomes, in fact, an embolus. Now, filariæ are prodigiously prolific. Myriads of young are expelled in a very short time. I have watched the process of parturition in the minute *filaria corvi torquati*. Every few seconds a peristaltic contraction, beginning low down in the uterine horns and extending to the vagina, expels

some twenty or thirty embryos. If this process of parturition occurs prematurely, or peristalsis is too vigorous, and extends to a point high up in the uterine horns where the embryo has not yet completely stretched its chorional envelope, then ova are expelled. These, as they reach the glands, where the afferent lymphatic breaks up into fine capillary vessels, act as emboli, and plug up the lymph-channels one after another until the fluid that carries them can no longer pass. In this way the gland or glands directly connected with the lymphatic in which the aborting female is lodged, are thoroughly obstructed. Anastomoses for a time will aid the passage of lymph, but the anastomosing vessels will carry the embolic ova as well as the lymph. The corresponding glands will then, in their turn, be invaded, and so on until the entire lymphatic system connected directly or indirectly with the vessel in which the parent worm is lodged becomes obstructed.

"This, I believe, is the true pathology of the elephantoid diseases:—1st, parent filaria in a distal lymphatic; 2nd, premature expulsion of ova; 3rd, embolism of lymphatic glands by ova; 4th, stasis of lymph; 5th, regurgitation of lymph and partial compensation by anastomoses; 6th, renewed or continued premature expulsion of ova; 7th, further embolism of glands. This process, according to the part of the lymphatic system it occurs in, the frequency of its recurrence, and its completeness, explains every variety of elephantoid disease.

"It may be objected that I have assumed too much in supposing that the parent worm is liable to miscarry. But I have sufficient evidence in the two cases I have narrated that it has occurred; and if it has happened twice in a limited number of cases, it certainly happens not unfrequently. Perhaps I have examined lymph from scrotum, glands, or urine in 200 cases; yet in this limited number of observations evidence of premature birth of ova was obtained twice. Therefore, the thing cannot be of very rare occurrence, although to have sampled the lymph at the proper time, and in a suitable case, must be regarded as a fortunate circumstance not often to be encountered."

There is, then, at least one disease in man caused by the disease of a parasite in his body.

CINCHONA deposits may be readily cleaned from bottles by using aqua ammonia.

PRIMARY PNEUMONIA AS A COMPLICATION OF SEPTICÆMIA.

BY H. MCNAUGHTON, M.D., ERIN, ONT.

Mrs. R., æt. 30, the mother of five children, had an attack of articular rheumatism about five years ago. Since that time she has suffered a good deal from soreness and swelling of the wrist-joints and fingers, but there does not appear to be any organic affection of the heart.

About the end of January last, when within about six weeks of her expected confinement, she had a sudden attack of uterine hæmorrhage; fourteen days afterwards it returned with increased profusion. On my arrival, the dilatation was sufficient to enable me to rupture the membranes. The pains came on promptly, and in a short time she was delivered of a dead fœtus. On the ninth day her pulse was 90, there was nothing abnormal and beyond a slight tenderness in her breasts, she felt as she expressed it, "very well."

On the twentieth day she complained of an intense pain in the right middle finger; on the following morning it was much increased and the finger was greatly swollen. On making an incision, a considerable quantity of matter escaped and she experienced some relief. The next morning, the swelling had extended to the neighboring fingers and the palm of the hand. There was a red streak up the arm and tenderness in the axillary space; at the same time the left foot began to swell and was very painful. The pulse was 130; respirations 45 per minute. She had a short cough and complained of a sharp pain in her right side. There was rusty-colored expectoration and the usual physical signs of engorgement of the posterior and lower portion of the right lung. On making incisions in the hand and dorsum of the foot, a free discharge of matter took place.

Three days after the trouble began in the fingers, the cough grew loose and there was less difficulty of breathing. She continued to improve from this time.

The discharge from the incisions continued for about four weeks. The pain and swelling which troubled her so much previous to her recent illness have nearly disappeared and she has regained the use of her joints to a corresponding extent. Can it be that the pneumonia was due to a septic condition of the blood, as a result of the puerperal

state? Such a complication invariably terminates in death. The recovery of the patient renders the existence of a secondary pneumonia extremely improbable.

During the first night of her suffering from the finger, she was exposed to a current of cold air and was frequently in and out of bed. The probability is that the affection of the lung developed under the same influence that produces what we commonly call a "cold,"—that it ran its course concurrently with the septic trouble which was due to the puerperal state.

The treatment consisted in the application of warm poultices to the chest and affected parts and the free use of quinine, muriated tincture of iron and chlorate of potash.

Correspondence.

PROVINCIAL TARIFF OF FEES.

To the Editor of the CANADA LANCET.

SIR,—I would like to suggest that at the coming meeting of the Ontario Medical Association there be some discussion and settlement of the vexed question of "Tariff of Fees." The profession should in this Province adopt a tariff which might be published with the proceedings of the meeting in the newspapers, and in this way be brought before the public. There is now a gross irregularity in some sections in reference to the fees charged for professional services. In one city which I shall not mention, one medical man charges one dollar per visit in town, while a few steps further on another medico charges fifty cents per visit. Both men write M. R. C. S., Eng., after their names. The charge for visits in the country also demand attention, and should be fixed by some established tariff.

The Ontario Medical Association will deserve the thanks of the profession and the public if this matter is settled at the coming meeting. I would suggest that this subject occupy the earnest attention of the Association, and that the medical men of this Province turn out in large numbers to show their interest in having a permanent tariff of fees established for the whole Province.

Very sincerely yours,

PROTECTION.

UNPROFESSIONAL.

To the Editor of the CANADA LANCET.

SIR,—As I have always noticed, the "CANADA LANCET" endeavours to elevate the status of our profession and to chastise irregularities, and as we have medical men here needing notice for their delinquencies, I wish to briefly call your attention to the following:—

Dr. ——— wishes to announce to the public that hereafter he will make 25 per cent. discount on his already low charges, and adopt the three months system of settling his books, thereby relieving those who are willing to pay their bills promptly, from making up for the loss accruing out of the long standing bills and bad debts of others.—Amherst, N. S.

His practice is to charge fully up to or beyond our tariff in cases where he can get the opportunity, but "his already low charges" are just exactly 50% less than the tariff, and now he proposes another 25% discount. This he does to secure the office of medical attendant of the township, and also of Working Men's Unions, etc., etc.

Yours truly,

May 3rd, 1883.

M. D.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

SANITARY CONVENTION AT REED CITY, MICH.

(Reported for the CANADA LANCET.)

The convention was held April 26 and 27, 1883, and was a very successful one, being fairly attended by the citizens of the place, by health officers of townships, cities and villages in the surrounding counties, and by sanitarians from other parts of the State.

After introductory remarks by the President of the convention, Rev. J. W. Hallenbeck, and an address of welcome by Mr. W. M. Slosson, of Reed city, and a statement of the purposes of the convention by Hon. John Avery, M.D., president of the State Board of Health, a paper was read by H. D. Bartholomew, C.E., city engineer of Lansing, Mich., on "Drainage and Sewerage," in which he stated the principles which should govern the laying-out and construction of drains, the principles which should govern the construction of sewers,

calling attention to the different requirements in the two cases, drains requiring ready entrance of water throughout the entire system, while sewers should be watertight at all places except at entrances and exits provided. He spoke of the rules to be observed in calculating the size where it was attempted to make one set of conduits fulfil both these requirements, and pointed out the advantages of the separate system under certain circumstances where applicable. He then made special recommendations for the conditions at Reed city.

Dr. E. S. Richardson, of Reed city, the secretary of the convention, in his paper on the water-supply of Reed city, showed diagrams illustrating the subject. The first was a profile of the Flint and Pere Marquette Railway from Ludington to Midland, showing that the water-supply of Reed city must come largely from the rainfall on the circumscribed area west of Reed city. Another diagram exhibited a section of the earth down to the level of the bottom of the wells from the depôt to the cemetery, the latter being on the highest ground, and the soil being sandy. Extraordinary precautions will need to be taken to prevent the leaching down from the cemetery and privy-vaults in the town, to the water-supply beneath. Out of a large number of wells examined in the place, he had found but two contaminated, and samples of the water from them were exhibited, illustrating the evidence of sewage-contamination; he also showed a sample of water from a well outside of town, on premises where there are cases of typhoid fever, and one recent fatal case; the water was very foul, as might be anticipated from the position of the well, between the house and the barn, which are on banks of clay, reaching into a stratum of sand which has no continuous protecting layer of clay over it and receives the washings from the barn.

Mr. O. P. Dewey, of Reed city, presented the subject of the mischief done to public health by means of patent medicines and quack doctors.

F. J. Groner, M.D., of Big Rapids, gave a very interesting and able resumé of the present literature of the subject of germs in disease, including a list of a large number of diseases now known or believed to be caused by their own specific germs. Incidentally, he referred to several grounds for hope that, in the near future, several of these diseases might be favorably modified by means similar to that by which small-pox is modified by vaccination.

Hon. John Avery, M.D., president of the Board, read a paper on house ventilation.

C. H. White, M.D., of Reed city, gave a concise history of diphtheria, and a short account of what is now known of that disease. In the discussion which followed, Henry B. Baker, M.D., secretary of the State Board of Health, presented a short paper, entitled, "Epidemic-waves of Diphtheria," showing that the disease tends to recur in a community at comparatively regular periods, and that this period seems to be shorter in cities than in sparsely settled countries. The evidence seemed to indicate that diphtheria was usually spread from person to person, and from country to country. Dr. Richardson mentioned cases illustrating the great contagiousness of the disease, and the general tendency of the discussion was in the same direction, and at the close of the discussion the document issued by the State Board of Health, on the restriction and prevention of diphtheria, was distributed to the audience. Several other papers of interest were read and discussed, after which the convention closed.

ONTARIO BOARD OF HEALTH.

The Provincial Board of Health met again on the 10th ult, Dr. Oldright in the chair. Present: Prof. Galbraith, Drs. Covernton, Yeomans, Cassidy, Rae, and Bryce. The chairman delivered his annual address, which consisted of a retrospect of the past year, and also a consideration of the prospective work of the board. He advocated the appointment by the Municipal Council of every city, town, incorporated village, and township of a local board of health, which in turn shall appoint a health officer for the municipality, or for several adjoining municipalities, should it be necessary for the purpose of avoiding expense or for other reasons.

He also referred to the restriction and prevention of contagious and infectious diseases, the neglect of the act requiring notification of infectious diseases, and the misconception regarding the object of the clause, many supposing the object to be the removal of the infected person, instead of its being in the vast majority of instances for the purpose of securing a sufficient separation of the infected from those who would otherwise be likely to become so.

Again, some medical practitioners object to the manner in which certain health authorities have

provided for the notification of cases of infectious disease by an open post-card. With a few another reason exists in false notions regarding the demands of professional confidence. The legal practitioner is most scrupulous in reference to this point; he regards as sacred any knowledge that he may possess regarding the actions of his client who has committed a homicide; but even *he* does not consider it any part of his duty to connive at the continuance of the careless acts of a client by which the lives of others are endangered. Neither is it any part of the duty of a medical practitioner to connive at the disregard of his patient as to whether he sends the seeds of death and disease amongst his neighbour's or it may be his customer's children.

He further alluded to the outbreak of small-pox in Shuniah, Lake Superior, and the rapidity with which it was stamped out by the energetic action of Sheriff Clark, M.D., health officer, Drs. Smellie and McCammon.

Dr. Cassidy read the report of the Committee appointed to consider the desirability of having instruction in hygiene regularly imparted in schools, the general conclusions of which were: That greater prominence should be given in Public and High Schools to the study of hygiene, and that to accomplish this end in the most expeditious and satisfactory way, physiology and hygiene should be made a compulsory subject for the fourth class in public schools and for Intermediate examination. The report was adopted.

The Board then discussed, in an informal manner, the question of epidemics, and the duties of health officers in such exigencies.

Dr. Canniff gave his opinion as to the *modus operandi* to be followed in such cases, and believed that every victim of small-pox should at once be conveyed to the small-pox hospital, and that persons down with the scarlet fever should be properly isolated. He also dwelt upon the necessity of disinfectants.

Dr. Covernton held the same views. As to disinfection, he contended that the process should be carried on entirely under the supervision of a duly qualified officer, who would see that the matter was properly done.

Prof. Galbraith read the report of the Committee appointed by the Board, and composed of himself and Dr. Oldright, on the disposal of sewage. The report recommended the advisability of abolishing

the privy-pit by law, and after referring to the various methods of disposal of solid excrement, viz.: the water-works system, the Hull ash-closet system, the dry earth system, and the Rochdale pail system, concluded with a recommendation of the ashes or earth system, on account of their deodorizing properties and the freedom from putrefactive decomposition. The report was adopted.

On motion of Dr. Cassidy, seconded by Dr. Yeomans, it was resolved to forward a circular to all the municipalities in the Province, containing a number of questions regarding the health of the population and other matters.

Dr. Yeomans was appointed to watch legislation in connection with the Board, and Drs. Oldright, Cassidy, and Prof. Galbraith to be the publication committee.

Selected Articles.

DIABETES MELLITUS.—TYSON.

The patient whom I show you is 70 years of age, a tailor, who was admitted to the hospital August 31, 1882. According to his own account, he always had fair health until three years ago, when he noticed that he was passing more urine than usual, and was continually thirsty. At the same time he was annoyed by a dryness of his throat and mouth.

It was with these symptoms that he was admitted to the hospital, and they at once suggested an examination of his urine, which was found to contain sugar. Our first note is dated September 7th, when he passed 96 ounces with a specific gravity of 1032, and the next day he passed 112 ounces, having the same specific gravity. The first quantitative analysis was made on the 10th, when the urine was found to contain 21 grains to the fluid ounce. I apply the tests in your presence, and you notice both the Fehling's copper test and Bötger's bismuth test respond promptly, the former precipitating the red cupric sub-oxide, and the latter black metallic bismuth.

You will find in the books, in addition to those named, quite a long category of symptoms, which are at times found associated with saccharine diabetes, but those we note in our patient, viz., dryness of the mucous membranes, unusual thirst, and the passing of an increased quantity of urine of high specific gravity, and containing sugar, are, after all, those essential to a diagnosis. A frequent mode of termination of the disease is by tubercular phthisis, when, of course, are super-added the symptoms incidental to it. Among others, is an annoying itching about the *meatus*

urinarius, caused by the constant passage of the sugar-charged urine over it, and in females this sometimes extends to surrounding parts, producing a distressing *pruritus vulvæ*. Emaciation, great muscular weakness, and the loss of sexual inclination are symptoms incident to the mal assimilation of ingested food, which, though taken sometimes in more than sufficient quantities, fails to serve its purpose.

Without delaying further, therefore, to discuss the less essential symptoms of the disease so evidently present, let us ask ourselves the question, what is diabetes mellitus? It is scarcely necessary for me to say to you that it is not a disease of the urinary organs. Its study has naturally fallen into the hands of those interested in these diseases, because it requires for its recognition a study of the urine. But the kidneys are simply the organs which eliminate the sugar from the blood, which is there in undue quantity. Glycosuria, or saccharine urine, implies glycæmia, or saccharine blood. If there is no sugar in the blood, there can be none in the urine.

A certain relation of the nervous system to glycosuria has been known to exist since Bernard's discovery that puncture of the floor of the fourth ventricle produced it. Since then it has been found to succeed upon section of the medulla oblongata, the optic thalami, and great crura cerebri; by destructive lesions of the pons, and middle and posterior crura cerebelli; section of the spinal cord above the second dorsal vertebra; by section of filaments of the sympathetic nerve ascending from the first thoracic ganglion to accompany the vertebral artery; by removal or injury of the superior cervical ganglion; and sometimes, but not always, after section of the sympathetic in the thorax; and even after section of the nerve trunks of the limbs, as the sciatic.

With such glycosuria is invariably associated an active hyperæmia of the liver. It must be remembered, also, that an important function of the liver is the formation of the so-called glycogen or animal starch from the starchy and saccharine articles of food, and to a slight extent from albuminous food. Thus produced, it is stored in the liver, but re-converted into sugar and passed into the blood in such quantities as are demanded by the organism, for oxidation. Remembering this function of the liver, there are two ways in which an excess of sugar may get into the blood. Either the grape sugar, formed by the digestion of sugar and starches, may pass too rapidly through the hyperæmic liver to permit its conversion into glycogen, or having undergone this conversion, it is too rapidly re-converted into grape sugar to be oxidized. The blood soon acquires an excess of glucose, and the latter then appears in the urine. It has been ascertained by experiment that when the amount of glucose in the blood exceeds one-

quarter of one per cent. it makes its appearance in the urine.

But in whichever of these ways the result is produced, the hyperæmia of the liver is always present. Hence it follows that whatever will produce such hyperæmia may produce diabetes, whether it operate through the nerve centres or not. Two cases of diabetes have come under my notice in which the symptoms were preceded by biliary colic and passage of gall-stones. The one has disappeared under treatment, the other remains uncured. Artificial irritation of the liver by needles and galvanic currents has also produced glycosuria. While injuries and diseases of the nervous system are often accompanied by glycosuria, there are many cases in which it is impossible to discover any relation between the two conditions, and not all cases of diabetes, nor even a majority, dare be considered diseases of the nervous system. It is not unlikely that sometimes the hyperæmia of the liver is a reflex one, being caused by irritative influences operating through the pneumogastric nerve (which is the sensory, and not the motor, nerve of the sugar-forming process) upon the diabetic centre, and thence through the vaso-motor nerves in the spinal cord and sympathetic upon the blood-vessels of the liver. Among these reflex relations must be placed derangements of digestion, which, acting upon the end filaments of the pneumogastric, produce the requisite irritation and its reflex results. It must be admitted, however, that there are still many difficulties in the way of explaining the phenomena of diabetes mellitus. Thus, admitting that a certain number of cases, which cannot be due to central nervous lesions or disease, are the result of reflex irritation, how are we to account for the continuation of the symptoms after the irritation has apparently disappeared? Can it be that the liver, once thrown into the hyperæmic state, by reason of a sort of inertia, cannot return to its natural condition while such articles of food are given as stimulate its glyco-genic function?

In autopsies, alterations in the liver, both of a gross and microscopic character, are sufficiently frequent to make it reasonable that temporary or permanent changes in this organ are at the bottom of a large number of cases of diabetes. These changes are chiefly of size, color, and consistence. The liver is darker and harder, and, while sometimes it is only slightly enlarged, at others it is three times as large as in health. For the more minute changes I must refer you to the books. But it cannot be denied that these changes may be the result of hyperæmia also. Diabetes has been associated, not infrequently, with pancreatic disease.

It is not impossible also that a transient glycosuria—it should scarcely be called saccharine diabetes—may result from an over-ingestion of

sugar-forming substances. Any one may produce on himself a glycosuria by the too free consumption of saccharine and amylaceous foods.

Whatever may be the difficulties in the way of explaining the phenomena of diabetes from the standpoint of digestive derangement, that some such relation exists is shown by the result of *treatment*. For by far the most frequently successful plan of treatment is that which excludes saccharine and farinaceous articles from the diet. It occasionally happens that this fails to relieve the symptoms, and when this is the case we may infer that some serious lesion of the nervous system is at the bottom, or more likely, perhaps, that the liver has become secondarily so much altered that it cannot resume its functions, and that now even albuminous foods are being converted into sugar. Of the selected food, that which gives the most satisfactory results is a diet of *pure skimmed milk*, or buttermilk. Our patient has been carefully tested on this system of diet. On referring to the notes, I discover that on October 30th he was passing 56 ounces of urine, of a specific gravity of 1029, and containing 18 grains of sugar per fluid-ounce. On the day before this he passed 76 ounces, specific gravity 1038, and containing 23 grains of sugar to the fluid ounce. On the 30th day he was placed entirely upon a milk diet, and we had an immediate diminution in the amount of sugar passed. On November 1st, there were only 10 grains of sugar per ounce; the amount of urine passed in 24 hours still remained at 56 ounces. Replacing him upon a mixed diet, immediately the quantity of urine and the proportion of sugar rose, to be again reduced on restoring the skim-milk diet.

It is found sometimes that a patient is not able to bear a milk diet, although this occurs less frequently than might be supposed. Pure skimmed milk is to be preferred, chiefly because of its easier assimilation. Some observers, of whom Dr. Donkin is the chief exponent, claim that the skimmed milk has a special curative action, but I cannot see any reason for this. All that is removed from it by skimming is the fat, and fat is not converted into sugar in the liver. It is most interesting to observe that under the use of large quantities of milk how much less urine is passed than fluid ingested. The body weight can easily be maintained on a milk diet, although it is impossible to lay down a rule as to absolute quantity required. I have known the weight to be maintained by two quarts per day, and I have known five and seven a day to be necessary. The milk is best administered at stated intervals and in fixed quantities. I always begin with eight ounces (an ordinary tumblerful) every two hours, increasing as required.

If a milk diet cannot be borne, a restricted diet can be obtained, which is better than a mixed diet. A purely albuminous diet is almost unendurable for any length of time, but there are certain vege-

tables which contain but a small amount of sugar-producing substance which may be added to meat. Such are the "green" vegetables, including spinach, cabbage, tops of celery, green peas, beans, etc., as well as the acid fruits, and, by a diet such as this, the most surprising results may be obtained. It appears that the vegetable sugars, as those found in berries, are more easily assimilated than cane sugar. Even where a skim-milk diet is well borne, my practice, after the sugar has disappeared, is to gradually add other articles, in the shape of oysters, game, and green vegetables, watching the urine for any return of the sugar; and it is always important to keep a case under observation for some time after sugar has disappeared from the urine.

An article of food which is much missed by some is *bread*, and it is scarcely necessary to say that it is one of the most objectionable, because of the large amount of starch it contains. And I regret to say that I have not found gluten bread a satisfactory substitute. A recent experience will illustrate. I have now under my care, a lady who had been for nine months under treatment for diabetes before I saw her, but in whose case the pure skimmed milk had never been tried. She had finally, in despair of recovery, been allowed to take anything she wanted, and when I first saw her, was drinking a quart of champagne daily to quench her thirst. It is needless to say this was discontinued, and she was put upon a pure skim-milk diet, and an unlimited amount of Apollinaris water. In ten days the sugar had disappeared, and shortly thereafter I permitted the gradual addition of other articles of diet, including green vegetables. All went well until she asked to be allowed to take some gluten bread, which I permitted. In three days I examined the urine, and sugar was again present. The gluten bread was discontinued, and in three days the sugar had disappeared. The resumption of gluten bread was followed by the return of sugar, and its withdrawal by the disappearance of the sugar. Such an experiment is, I think, conclusive. Of course, it is not claimed by the makers of gluten flour, that it is completely free from starch, but as it is already a rather uninviting food in its present state, the inference is, that when it is entirely freed of starch, the bread made from it will be scarcely tolerable. At the same time it must be admitted that the gluten bread contains less starch than the ordinary wheaten bread, and there may be cases in which the starch of the former is assimilated, when the quantity in the latter could not be. The same may be said of the so-called "bran-bread," made of unbolted flour. With other substitutes for wheaten flour, as the almond flour of Pavy, bran flour, inulin, etc., I have had no experience.

Are drugs of any use in the treatment of diabetes? I believe they are, although if compelled

to rely upon drugs or diet alone, I should prefer diet. The most efficient remedy is probably *codeia*, although I am almost afraid to say this, for a few months ago I should have given the palm to *ergot*, and until recently I have always used it first. The use of *ergot* is based upon scientific principles, since it is well determined that it exerts a contractile influence upon the walls of bloodvessels, thus counteracting hyperæmia. I have frequently used it, and have no doubt whatever of its efficiency. The best preparation is the fluid extract, which is given in doses of from twenty drops to a fluid-drachm four times a day. *Codeia* is not a new remedy in this disease, having been suggested by Dr. Pavy fifteen years ago. We have found marked results from its use in the case before us. The plan I usually adopt is to begin with half a grain three times a day, gradually increasing the dose, watching its soporific effects, as well as that upon the pupil. I have given patients in this house as high as ten grains a day, and fifteen grains a day have been given. In this patient, after giving one and one-half grains a day for a few days, we were struck with the smallness of the pupil, but on discontinuing its use for a short time, we discovered that the patient naturally had a very small pupil.

You may ask, have you ever cured a case with *codeia*? I cannot say I have; possibly, perhaps, because I should be afraid to rely solely upon it, or any other one drug. But such cases of recovery are reported. As is the case with all diseases difficult to cure, there is in addition to those named, a long list which have been put forth as cures. *Bromide of potassium*, also an old remedy, has recently been again brought forward by the French school as peculiarly efficient. I can easily understand how, in a certain class of cases, it would be of value, as those due to hyperæmia of the brain, cases which may be characterized as nervous. We know that emotional causes are often at the bottom of diabetes. Both mental anxiety and physical fatigue have been known to produce the disease, and when purely emotional causes have operated, the bromides may be beneficial, but I have never found them so.

Within the last few days the medical journals have published the treatment of Dr. Clemens, of Frankfort-on-the-Main, by a solution of what he calls *brom-arsen*, which is probably a bromide of arsenic. Dr. Clemens bestows the most extravagant praises upon the remedy; so extravagant, indeed, that I mistrust it, although arsenic itself has long had a reputation in the treatment of diabetes, and not without reason. I shall, however, make an early test of it. He makes it by adding bromine and arsenious acid to glycerine and water, in such proportions that one drop represents "1/4th grain" of bromide of arsenic. Clemens recom-

mends it to be given, along with a selected diet, beginning with one drop three times a day, and gradually increasing until eight or ten drops are given per day. He gives it in a given quantity until it ceases to have an effect, and then he increases it, one drop at a dose, until, as he claims, the disease is cured. He also recommends the use of the *constant current* from 20 to 24 cells, one pole being placed at the nape of the neck and the other over the liver. This has been recommended by other German therapeutists. I believe I have tried most of the other numerous remedies recommended in the books for diabetes, but have found them valueless as to specific effects.

Certain it is that we must make different classes of cases of diabetes, and we should never begin treatment until we have as nearly as possible classified our case in accordance with its course. There are cases which can be easily cured by a selected diet; others in whom, while a cure is apparently impossible, the disease may still be kept in abeyance for years, and the patient is practically well. Others again have had sugar in their urine for many years, and seemed not to be seriously affected by it. These are generally stout persons and past middle life. Clemens says, in the article referred to, that the disease in thin, spare persons is generally due to some nervous lesion, and in stout persons to defective assimilation, and in this he is not far wrong. In other cases still, all treatment seems unavailing. The amount of sugar passed may be reduced by treatment, but the patient does not gain any strength. But I believe there are comparatively few cases which, if discovered sufficiently early, are not amenable to treatment. The disease is occasionally overlooked until it has existed for some time. It is well known that it is very much more serious in young persons—say under 20 years of age—than in adults. Yet within the past two years I have known a young girl of 12 years under the care of one of my professional friends recover completely.

Diabetic patients should be careful about permitting any surgical operation. One of the terminations of the disease is gangrene, to which there

theary, corner of Broad and Spruce Streets, Philadelphia, has prepared for me a solution of bromide of arsenic, in the following manner: 77 grains of metallic arsenic in powder are added in small portions to 240 grains of bromine, the latter being placed in a long test-tube immersed in ice-water to prevent too rapid reaction, which is very violent. One hundred grains of the terbromide thus obtained are then dissolved in sufficient distilled water to make ten fluid-ounces. One minim will then contain one forty-eighth of a grain.

Since the above lecture was delivered, I have tried the remedy in two cases, both using an unselected diet. In the one case it could not be borne on account of an obstinate diarrhoea. In the second there appeared to be no effect on the quantity of sugar or urine, but the patient has gained a pound a week in weight for three weeks. The quantity reached was 8 drops a day, or 1/6th grain.

* Mr. R. F. Fairthorne, with Mr. James T. Shinn, apo-

is a peculiar tendency, and any operation is apt to be followed by gangrene. A year ago a diabetic under my care in this house was blistered upon the foot, and serious sloughing followed.

Cataract is not an infrequent complication, but the operation is not to be recommended for the reasons above given.—*Med. News.*

GASTRIC CANCER.—TYSON.

Before making a personal examination of this patient, I wish to call your attention to her extremely cachectic appearance. This is seen not only in the pallor of her face, but also in the almost bloodless condition of her lips. The little bloodvessels, which, seen through the transparent mucous membrane, give the red color to the lips, are either almost empty, or filled with blood which is deficient in red corpuscles.

As to her history, she is 40 years of age; is married; her husband living; she has had two children. Three years ago a hard lump appeared at the left angle of the mouth. This gradually ulcerated, and was removed two years ago by Dr. Wilson, at the Woman's Hospital. The growth, she tells us, was pronounced a cancer. The scar left by its removal is still visible, but there has been no re-appearance of the disease *in loco*. Before the operation there had been a gradual failure of strength and weight, and instead of her general condition improving after the removal of the tumor, it seemed rather to continue to fail.

She was admitted to the hospital September 15, 1882. At that time she complained of dyspepsia. The indigestion was characterized by acidity and the disposition to discharge acid fluid. This was the only trouble complained of. The efforts to counteract this acidity by the ordinary alkaline mixtures were but partially successful, and it was only by the use of large quantities of lime-water and other alkalies, and the final adoption of a pure-milk and lime-water diet, that this acidity was relieved sufficiently to secure her tolerable comfort, and at present she does not suffer much from this symptom. There soon supervened upon this condition a tendency to nausea, and a disposition to vomit. In this vomiting there was not, nor has there been since, anything like regularity, nor a fixed relation to the meals. Large quantities have never been vomited, and this has never been a troublesome symptom. The matters discharged were usually an acid fluid and partially digested food; occasionally, however, she vomited matters different from those described, and to these I shall refer in a few moments. There has always been some constipation, not obstinate constipation, for the bowels are easily relieved by ordinary aperient remedies.

As to the second kind of vomited matters, she

tells us that they consist of a substance resembling coffee grounds. She says that last night, for instance, she vomited a teacupful of this brown substance, which, in her own language, looked like the sediment which remains in the cup after the coffee has been drained off. This description is spontaneous, and, although we have never seen the substance, I do not think we dare doubt its nature. It is altered blood. The vomiting of this occurs at very irregular intervals, sometimes every week, and sometimes only once a month. She says that this peculiar vomiting occurred even before she came to the hospital. This, then, is her history so far as subjective symptoms are concerned.

On her admission we were impressed by her extreme pallor, and therefore frequently examined the abdomen for a tumor. She was also carefully examined for uterine cancer, but none was found, and there is no other disease of the womb. In the absence of anything distinctive in the symptoms, leukæmia suggested itself, and I had the blood examined by Dr. William E. Hughes, who reports that he found in a cubic millimetre of blood 1,999,000 red corpuscles, and 15,000 white corpuscles—one white to about 133 red. The red corpuscles were also small, but the disproportion between the two kinds was not considered sufficient to justify a diagnosis of leukæmia.

About the middle of November the looked-for aid to diagnosis presented itself—a tumor. This is now much more distinct than it was then. Even at a considerable distance you can see an elevation of the triangular space included between the lower border of the ribs and a line drawn from the angle of this border on the right side, through the umbilicus almost to the superior spinous process of the ilium on the left. In addition to this diffuse swelling there is a distinct tumor, nearly circular in outline and about two and a half inches in diameter, just to the left of the umbilicus; that is, a line drawn vertically through the umbilicus bounds the right edge of the tumor as a tangent does a circle, the mass of the tumor being to the left. I should have stated earlier that soon after admission, that is, about October 1st, there was not only tenderness in this region, but she also complained of pain independent of pressure, although no tumor was detected until a month later.

Let me briefly recapitulate the symptoms:

An intensely anæmic woman has suffered for some time from gastric symptoms, these symptoms being almost constant acid dyspepsia and a disposition to vomit, the vomiting occurring at irregular intervals and with no definite relation to the meals. Occasionally there has been vomiting of altered blood. There is a circumscribed tumor to the left of the umbilicus. The question as to what is the matter, is immediately answered by the suspicion, that it is a case of cancer in the stomach.

There are, however, some doubts upon this point, and it is partly for the purpose of trying to determine this question that I brought her before you to-day. While many of the symptoms of cancer of the stomach are present, some of the most distinctive are wanting. One of them is obstruction of the pylorus. There is no symptom of obstruction at this situation. In the vast majority of cases of cancer of the stomach, the pylorus is the point affected—in fact, the pyloric orifice of the stomach is, next to the uterus, the most frequent seat of carcinoma. There may of course be cancer of the cardiac orifice with obstruction, but under such circumstances the food is regurgitated immediately after ingestion and little altered. On the other hand, when the obstruction is at the pylorus, the vomiting comes on a couple of hours or even longer after a meal. It may not occur for several days after the food has been taken, but the longer the interval the greater the amount vomited. This is owing to the fact that the stomach becomes gradually dilated, and the longer the case lasts the less frequent is the vomiting. I recall an instance of cancer of the pylorus, in which this was particularly marked. In this patient the vomiting was sometimes at intervals of ten days, and then a bucketful was ejected. At the autopsy, there was found cancer of the pylorus with great dilatation of the stomach, from which I removed over a gallon of fluid. In the present case there has been nothing of this kind.

Let me again refer to the situation of the tumor, which lies to the left of the umbilicus. This is, however, not inconsistent with the view that there is cancer of the pylorus. I have several times called attention to this fact. If you examine the books, you will find that they state that the most frequent situation of the tumor in cancer of the pylorus is in the epigastric region, a little to the right of the median line, and below the free border of the ribs. I do not know how many cases of this disease I have seen, but in at least half a dozen the tumor was exactly in the position occupied by the mass in this case. In the patient with the enormous dilatation just alluded to, the tumor was in the same situation, but a little to the right. At present, I recall no case in which the tumor has not been in the umbilical region. The situation of the pylorus in health cannot be said to be fixed, but it is probably most frequently to the right of the median line, and a couple of inches below the ribs. I cannot but think that writers have been misled by this normal position, to expect that a tumor of the pylorus is always found in the same place. But it must be remembered that the tumor soon acquires weight, and that the stomach is easily displaced; to such displacement dilatation often contributes. Apart from this, if you examine the position of the pylorus after death, in cases where there has been no disease of the stomach,

you will find that it is not constant, and that it is as frequently to the left of the median line as to the right. So that, although we find the tumor in this position, we have in this fact nothing to diminish the probability of this disease being cancer of the pylorus; the strongest point against cancer of the pylorus being the fact that there is no obstruction.

What else could it be? The most likely disease after cancer of the stomach, would be cancer of the pancreas. I have seen two or three cases of cancer of this organ, in which the tumor occupied this situation. In a case which I had a year ago, there was a tumor in precisely this situation. The autopsy proved it to be cancer of the pancreas, as had been suspected before death. Is there anything which will help us in this dilemma? In the first place, in a large proportion of cases of cancer of the pancreas, there is jaundice; there is no jaundice in our patient. Again, in cancer of the pancreas there are symptoms of indigestion, which resemble those present in this patient more than they do those of typical cancer of the stomach, excepting the vomiting of blood, which does not occur in pancreatic cancer. In the latter there is a tendency to diarrhœa, and frequently the liquid stools contain fat; sometimes this is very manifest. In the case to which I have just alluded, the diagnosis was made from the presence of indigestion with irregular vomiting, and the characteristic condition of the stools. By the use of opium, bismuth, etc., the diarrhœa is checked for a time, but in a few days the liquid discharges seem to burst through a barrier which held them temporarily in check. In the patient before you to-day, there is but one of these symptoms, *i.e.*, indigestion. The stools have been carefully examined, but no fatty matter has been found; neither is there any diarrhœa. There is, on the other hand, some constipation, although it is not as marked as in cancer of the pylorus with obstruction. Balancing these facts, therefore, the probabilities are in favor of the presence of cancer of the pylorus, notwithstanding the absence of the most valuable symptoms of obstruction.

Cancer involving other portions of the stomach does not produce a circumscribed tumor such as we have here. The cancers affecting the greater and lesser curvatures are diffuse growths and soft cancers, whereas those at the pylorus are circumscribed tumors and epithelial or scirrhus cancers in nature.

The question of *treatment* is an important one. For although it is impossible to do anything to remove the growth, we should not, at the same time, be apathetic in the matter, and I am quite sure that a good deal more can be done than is commonly thought possible. As a rule, the food taken into the stomach is sooner or later rejected; but this is partly because the stomach is disquali-

fied to prepare it; to reduce it, by digestion, to the liquid state it must have to enable it to pass through the pylorus. Now if we can digest the food partially or altogether, before it is put into the stomach, we obviate this difficulty. Still better will we accomplish our purpose if we can introduce it partially or wholly digested into the rectum.

The stomach has no use outside of the preparation of the food for digestion. It is not a vital organ in the sense that the heart and the lungs are vital organs. It is important so far as it prepares the food, but if the food can be prepared for absorption outside of the body, its necessity is diminished, as it also is, if we introduce this artificially digested food into the rectum. Or we may use both of these methods. We can, by the use of prepared food, diminish the labor of the stomach, and by using the prepared food by the rectum, we can relieve the stomach of all labor. This is being done of late by peptonized foods of various kinds. The food may be prepared by the *extractum pancreatis*, which is now made by a number of pharmacists. Three to five grains of the extract added to a pint of milk and placed at a temperature of 100°, will in one hour peptonize all the casein. A curd is first produced, which subsequently undergoes digestion. The addition of rennet will then not produce coagulation. Milk thus prepared makes little demand upon the stomach for digestion, and it can be introduced by the rectum with good effect. The peptonized milk has a peculiar bitter taste, and unless this bitterness is present the digestion is unaccomplished. The digestion will take place at a lower temperature than 100°, but it takes longer.*

I have had very satisfactory results from another method of preparing the food for use by enema, the only objection to it is that it is a little troublesome. I saw it suggested in 1876, but by whom I cannot now recall, and I have since frequently used it when the patient is to be maintained solely by enema. The plan is to take from one and a half to two pounds of beef with the fat removed, and from one-half to one pound of fresh pancreas. The pancreas is finely chopped and afterwards bruised in a mortar with tepid water at a temperature of 100°. It is then strained through a cloth.

* The following method, slightly modified from that usually recommended, after numerous trials by patients, has been found most satisfactory: Take one pint of skimmed milk, to which add one gill of water. Heat to 140° F. (a temperature at which the finger can be immersed for half a minute). After taking from the fire, stir in three grains of powdered pancreatine, and fifteen grains carbonate of sodium. Place in a covered kettle or jug and roll up in a cosy (an ordinary gossamer water-proof coat answers admirably well), near a stove or register to keep warm. Let it remain thus for an hour and a half; it then resembles slightly thickened milk, but there is no curd. Pour it into a pitcher and set it aside to cool in the open air. Thus prepared, it has the slightest perceptible tinge of bitterness, and is very palatable.

The juice obtained is intimately mixed with the meat, which has previously been chopped into small pieces. The product is next allowed to stand at a temperature of 100° for two hours; it is then ready for use. This amount suffices for two daily injections. The preparation decomposes very quickly, so that it has to be made fresh every day. I was surprised at what I had accomplished by this method. In the man with the dilated stomach to whom I have referred, nothing could pass the pylorus, but during the use of daily enemas there occurred each morning an evacuation from the bowel as natural as though the patient were living on a mixed diet and digesting it properly. The extract of pancreas will probably answer as well as the method which I have described, but I have not had any experience with it.

In this connection, I want to call your attention to a little book by Dr. William Roberts, *On the Digestive Ferments, and the Preparation and Use of Artificially Digested Food*. After an account of normal digestion, he gives a description of the methods of preparing food by the use of these ferments. The method which I have just given you is not contained in this book.

The use of peptonized food is advantageous in many diseases, and especially in the diseases of children. Most cases of diarrhoea in children are due to indigestion, but by means of the extract of pancreas, we have the power to prepare the food for absorption, thus lessening the labor of the stomach. The so-called *liquor pancreaticus* may be used for the same purpose, but I have had more experience with the extract.

By using this method of alimentation we can, in cancer of the stomach, prolong the life of the patient and make his condition less burdensome. But it occasionally happens that rectal alimentation does not appease the sense of hunger; and I have had patients who, in spite of all injunctions to the contrary, and who, knowing themselves that they would sooner or later reject it, would take food by the mouth.

It has been proven, over and over, that life can be sustained in this way. Not only have dogs been kept alive for months by rectal alimentation, but the same thing has been done with men. But where it is possible, the stomach should be made use of to some extent, and thus save the rectum.—

Med. News.

POTTS DISEASE.

CLINIC BY PROF. SAYRE.

I here present to you a little boy aged five years and six months, who was brought to me a year ago suffering from Pott's disease of the upper dorsal vertebrae. When he was fifteen months old he fell

out of the back of a baby carriage and sustained severe bruises, and in a little while commenced to complain of pain in the vertebral column; at the end of a year he had become a cripple, but previous to this he had an attack of the measles; occasionally he would fall down with apparent paralysis of the limbs. Before he was brought to me the child had been wearing a brace for five months, but when I first saw him the brace had not been worn for three weeks, but even at that time there were extensive lesions upon each side of the spine at the point of the disease, which had been caused by the brace; and upon the sides of the ilium were erosions caused by the instrument; here you have another case fully illustrating the result of wearing these so-called braces. I have several patients at the present time suffering from severe abscesses produced by these instruments, and although they have recovered from the disease of the spine, they have a necrosed ilium as a result of its use in the earlier stages of their spinal disease. At the time this child was brought to me he was unable to stand, the deformity being very great as you will observe by the photograph which I had taken at the time; (photograph passed to class) but now you perceive that he can stand erect without the plaster-of-Paris jacket. I applied the plaster jacket and head rest immediately upon his coming to me, and during the year following put on several new jackets as the deformity decreased and the child grew and developed, until he has reached the improved condition in which you now see him.

You will observe that as I place my hand upon his head and press the vertebrae together it causes a sensation of pain, showing that the disease yet remains, therefore he will require the jacket and head rest for some time yet, and which I intend to apply before you. First, you will observe that I apply this knitted shirt, which fits the body close, to the skin at all points, being fastened between the legs by a safety pin. I now place around the neck a soft leathern collar with two straps on either side, one passing over the inferior maxilla and the other over the occiput; these are fastened to this small cross bar above the head. I now pass two slings under the arms which are also attached to the cross bar, and the child is ready for suspension. I now raise the child up to his fullest height, but as you observe his feet still remain upon the ground; the extension must always be within the limits of comfort to the patient. If you find you have too much extension, at once lower the patient as requisite; by watching the countenance of this child I can at once tell when I have secured the necessary amount of tension.

Under no circumstances ever fasten the rope by which you make your extension, but leave it in the hands of some intelligent person.

The child being now suspended is ready for the

application of the plaster of Paris bandages. Having previously placed a pad under the shirt over the chest and abdomen, I pass the bandages around the body, my assistant rubbing each band into the one previously applied; having made the jacket of moderate thickness I now apply the *jury mast* for supporting the head. This consists of a light frame-work formed to fit the body and composed of two flat side rods and cross bars, from the centre of which passes up a central rod curving over the head, at the point of which is a small cross bar; affixed to this frame-work are thin strips of tin perforated in each direction and passing around the sides, the burrs from the perforations holding the frame in the bandages. This being now adjusted the plaster bandages are again applied completely enveloping it in the centre of the jacket. The child is now released from suspension and laid upon an air bed. You must however be careful in laying the child down that he does not bend his back, or your labor will be lost. I now draw out the pad from the anterior part of the jacket and while it is yet wet you will observe that I commence to mould it over the crests of the ilium and thus secure a shoulder at this point, and now I mould it below the ilium antero-posteriorly, widening it out at this point and giving the jacket an hour glass contraction as it were, and in this manner the jacket is held firmly upon the child. It now being sufficiently dry I cut it out under the arms to allow of free motion at this point; and I also cut out a portion at the hip to allow of the thigh being flexed upon the abdomen. As soon as the jacket has become thoroughly dry I shall place this small leathern collar with its chin pieces around the neck; the straps passing up at the side of the head are then fastened to the cross bar suspended from the jury mast over the apex of the head; and by this means support the weight of the head, and thus remove all the pressure from the spinal column.

The child should then be out in the open air as much as possible, and can run around as best suits him, as he is now free from all pain. (The child here stated that he felt no pain whatever; having evidently enjoyed the suspension as at one time he lifted his feet from the ground and wanted to swing by the suspension attached under the arms and around the neck.)—*N. E. Med. Monthly.*

THE TREPHINE IN HEAD INJURIES.

At the recent meeting of the Kentucky State Medical Society the question of "Trephining in Injuries of the Head" was brought to the attention of the profession in some carefully recorded observations on this important class of injuries by Dr. W. O. Roberts, of this city. The cases reported by him were thoroughly instructive, and demonstrated clearly the value of the operation in appro-

prate cases, and the importance of accurate discrimination in the selection of cases. In the course of the discussion which followed, Dr. D. O. Yandell and Dr. J. N. McCormick related some instructive clinical experience in confirmation of the views presented by Dr. Roberts. The attention of surgeons is again directed to this important question by Dr. Henry B. Sands, of New York in a paper read by him at the recent meeting of the New York Surgical Society.

The state of professional opinion upon this question of interference in head injuries is in such an unsettled condition that its discussion at the present time can not but prove of great advantage. A few surgeons in this country have of late years advocated a revival of the obsolete practice of trephining in simple fracture, when attended with displacement and in the absence of head-symptoms. With many practitioners there is an expression prevailing that in all fractures, even of the most simple character, when accompanied with depression, the trephine should be at once applied. It is to this feature of the question, the use of the trephine as a preventive measure, that we desire to direct attention more especially at this time.

This practice is particularly in favor in cases of simple comminuted fracture. It is argued that unless the fragments of bone are removed they will become necrosed, and establish thereby intra-cranial inflammation. While opposed to the known laws and behavior of fracture in other portions of the skeleton, this practice is contra-indicated by all clinical experience. The application of the trephine, too, in those cases where the inference is that some sharp fragment of the inner table has penetrated the membranes, is also a most injudicious and harmful practice. It must be remembered in connection with this class of injuries that the operation of trephining converts a simple into a compound fracture, a most serious alteration of the condition, and one to be induced only under circumstances of absolute necessity. As indicated in this connection by Dr. Sands, the unbroken skin furnishes a protection here more sure and trustworthy than anything yet offered by antiseptic surgery.

We have known the trephine to be applied in cases of fracture where the head-symptoms were quite ambiguous and indefinite, and where the depression was very slight. The result, so far as we have observed, under these circumstances is almost invariably fatal. Almost every practitioner is familiar with instances of great depression of the cranial arch, in which excellent recoveries have followed the treatment without interference. The powers of nature in these cases is remarkable. It is well known that when the depressed bone causes symptoms of compression, these symptoms may permanently disappear without an operation. The question of interference in fractures of the skull is to be de-

termined in connection with the nature of the damage done to the intra-cranial contents. The question is not one of prevention, but relates to the relief of lesions already induced. There are, of course, conditions in which the way is quite clear and the indications for trephining are positive. The guides to rely upon in deciding a course of action are the indications of contusion or laceration of the brain, and hemorrhagic extravasation. If the injury is limited to a depressed fragment of bone, without lesion of the brain and its membranes, the compression is rarely of long duration. With our present means of diagnosis, the course to be pursued in cases of simple fracture, with head-symptoms, is not easily determined. Each case is to be determined by the nature of the symptoms referable to the brain. It is to the analysis of these symptoms that more light is especially desired. That the range of the operation should be more definite, and that the indiscriminate use of the trephine in cases of simple fracture is to be condemned, will be admitted by all who give the subject the attention its importance deserves. That the operation which converts a simple into a compound fracture, and which in the most skillful hands may be accompanied with injury to the brain or its membranes, is inadmissible for purposes of prevention is the lesson of reason as well as of experience.—*Lon. Med. News.*

THE USELESSNESS OF STYPTICS.

In a paper read before the Philadelphia County Medical Society, Dr. J. B. Roberts (*Philadelphia Medical Times*) argues with much force against the use of styptics in general surgical practice. He states his objections to their employment in the following propositions: 1. Their reputation as hæmostatic agents leads practitioners to resort to them when more trustworthy methods are needed. Thus valuable time is lost, for, after temporary arrest, the hemorrhage recurs in the already anæmic patient, and is perhaps followed by disastrous results. 2. If they fail to control the bleeding—which they generally do if the hemorrhage is important—it is often so difficult to rid the surface of the pasty clots that subsequent ligation of the vessels is well-nigh impracticable. 3. Many styptics prevent union by first intention, because they irritate the raw surface, lead to inflammation, or induce suppuration.

He says, further, that Monsel's salt—the subsulphate of iron—has probably more reputation than any other styptic, yet it is the most objectionable of all. It covers the wound with black, sticky clots, which obscure further examination of the surface, prevent primary union, and may even allow bleeding to occur beneath them. I have seen such

leathery masses of coagulum raised up into vesicles by the subjacent hemorrhage.

There are but two scientific and satisfactory ways of arresting hemorrhage as usually observed in the practice of general surgery: 1. The first is occlusion of each individual vessel by ligation, torsion, or acupressure, and is generally not required for arteries smaller than the facial, nor for veins, except those of the largest calibre. 2. The second method is direct pressure by compresses and bandages, which, if properly applied, will always be effectual when the first method is not demanded. It is to be adopted when there is oozing from small arteries and capillaries.

In all cases of traumatic hemorrhage it should be recollected that a man can lose many fluid ounces of blood without serious injury, and also that no artery or vein can bleed if it is compressed by the fingers. These facts assure the surgeon that there are always time and means to control the bleeding, at least temporarily. Many arteries that spurt freely when first divided soon spontaneously stop bleeding. Therefore it is foolish to interrupt the steps of an operation by ligating every little vessel that throws out a jet of blood. Let the surgeon proceed, even if the arteries are quite large, and when he has finished his incisions he will find, to his surprise, very few points requiring ligatures. He should ligate these, and, after washing away the loose clots, make moderate and equable pressure. There will then be no part for styptics to play. It is possible, perhaps, that there may be occasional instances of oozing where pressure cannot be effectually applied; but these are certainly so rare that they do not materially affect the truth of the proposition that styptics are useless.—*Am. Med. Digest.*

THE HUMORS OF EXAMINATIONS.

It is related of a rough-and-ready examiner in medicine, that, on one occasion, having failed to elicit satisfactory replies from a student regarding the muscular arrangements of the arm and leg, he somewhat brusquely said, "Ah! perhaps, sir, you could tell me the names of the muscles I would put in action were I to kick you!" "Certainly, sir," replied the candidate; "you would put in motion the flexors and extensors of my arm, for I should use them to knock you down!" History is silent, and perhaps wisely so, concerning the fate of this particular student.

The story is told of a witty Irish student, who, once upon a time, appeared before an Examining Board to undergo an examination in medical jurisprudence. The subject of examination was poisons, and the examiner had selected that deadly poison, prussic acid, as the subject of his questions. "Pray, sir," said he to the candidate, "what is a poisonous dose of prussic acid?"

After cogitating for a moment, the student replied, with promptitude, "Half an ounce, sir!" Horrified at the extreme ignorance of the candidate, the examiner exclaimed, "Half an ounce! Why, sir, you must be dreaming! That is an amount which would poison a community, sir, not to speak of an individual!" "Well, sir," replied the Hibernian, "I only thought I'd be on the safe side when you asked a poisonous dose!" "But, pray, sir," continued the examiner, intent on ascertaining the candidate's real knowledge, "suppose a man did swallow half an ounce of prussic acid, what treatment would you prescribe?" "I'd ride home for a stomach-pump," replied the unabashed student. "Are you aware, sir," retorted the examiner, "that prussic acid is a poison which acts with great rapidity?" "Well, yes," replied the student. "Then, sir, suppose you did such a foolish thing as you have just stated, said the examiner; "you ride home for your stomach-pump, and on your returning you find your patient dead. What would you, or what could you, do then?" asked the examiner, in triumph, thinking he had driven his victim into a corner whence there was no escape. "What would I do?" reiterated the student. "Do?—why, I'd hold a post-mortem!" For once in his life that examiner must have felt that dense ignorance united to a power of repartee was more than a match for him.—*Chambers' Journal.*

THE TREATMENT OF PNEUMONIA.

We are indebted to Dr. W. Thornton Parker, Acting Assistant-Surgeon, United States Army, Fort Elliot, Texas, for the following item, communicated to him in a private letter by Prof. Baumler, of the University of Freiburg, Baden: "Our treatment in cases of pneumonia in the Freiburg Hospital is chiefly directed toward sustaining the strength of the patient until in the natural course of the disease the pyrexia leaves him. As the pyrexia is one of the chief causes of the exhaustion which in severe cases gradually sets in, we try to keep down the body heat by means of cool baths or wet packing, as well as by quinine (fifteen to twenty grains in one dose in the evening) or salicylate of soda (sixty to eighty grains within an hour in the middle of the night). The patient must be sufficiently fed by broths, beef tea and milk, and in every case we give from one-half to one pint of light wine, to which the populace is accustomed, in the twenty-four hours. *An ice-bag is applied to the chest when there are pleuritic pains.* Dover's powder or morphia is only given when there is restlessness or great pain or diarrhoea. With very sharp pains in the side we apply the morphia hypodermically. If there be much bronchial catarrh accompanying the pneumonia, we give ipecacuanha

in infusion with or without opiates. Sweet spirits of nitre I have never employed in pneumonia. Altogether, it is but very seldom used in Germany." *Med. and Surg. Reporter.*

VARIOUS PRESCRIPTIONS.—The man who commands the largest practice in Philadelphia, and who is at the same time the favorite lecturer on clinical medicine, is Prof. Pepper, of the University. He hardly ever delivers a lecture that is not published. They tell me he makes up by never writing an article, probably because he lacks the time. The way the doctor thumbs around on patients and brings out the points here and there is astonishing. Nothing but an immense experience and a close observation of disease could have given him his accurate knowledge. We pumped him on his way from the wards to the amphitheatre on typho malarial fever. Dr. Pepper does not believe there is such a disease. He thinks that cases thus diagnosed by practitioners were either typhoid-fever, with some malarial symptoms, or simple continued fever. He believes that physicians have confounded complications occurring in cases of disease with disease Typho-malarial fever so-called is no more a distinct disease than is typho-pneumonia. It should be treated as typhoid fever, and the complications are treated as such, just as they are when occurring in pneumonia, bronchitis, dysentery, etc. And the doctor nodded his head and passed into the amphitheatre. He had crushed a favorite idea of mine, and I take revenge by hurling the lesson at the heads of some of my western brethren.

Dr. E. T. Bruen is Prof. Pepper's assistant, and is preparing himself to fill the Professor's shoes in the future. He is connected with the dispensary of the Children's Hospital, where he gives instruction to graduates. At several of the meetings I gathered some good points, which are here presented.

A case of whooping-cough in a boy four years of age presented the symptoms of an acute attack of the disease. Dr. Bruen prescribed:

R Bromide quinine.....grs. xvi.
Syrup gum arabic.....fl. ʒ j.
Syrup ginger.....fl. ʒ j. M.

The patient was ordered to take a teaspoonful of the medicine four times a day. If no relief was experienced, it was to be increased. The mother was directed to prick a hole with a pin in a piece of paper every time the patient had a severe attack of cough during the day. She then compared the holes made on the different days, and if they did not diminish she increased the doses of the medicine up to eight teaspoonfuls a day. As the holes decreased she was to give fewer doses.

A little girl, nine years of age, suffering with obstinate malarial fever was ordered to take half-drachm doses of cream of tartar, dissolved in water, twice a

day. Dr. Bruen thinks that the cream of tartar assists quinine in its action as an antiperiodic.

In a case of mucous diarrhoea in a child of one year of age, Dr. Bruen prescribed what he called his favorite prescription:

R Bismuth. subnit.,.....gr. lx;
Fl. ext. rhubarb,.....gtt. viij;
Syrup. blackberry.....fl. ʒ ss;
Elixir orange,.....fl. ʒ ss. M.

Of this the child was ordered to take a teaspoonful four to six times a day. Proper feeding—barley-water, milk and limewater—was also directed. Starchy food was positively prohibited.

A little girl ten years of age, was afflicted with tuberculosis of the lungs. She was pale, emaciated, and harassed by a cough. Dr. Bruen prescribed:

R Olei morrhue,.....fl. ʒ j;
Syr. calcii lactophosphatis,....fl. ʒ ij;
Syr. ferri iodidi,.....fl. ʒ j;
Liquor calcis,.....q. s. ad fl. ʒ ij.

M. Sig: A teaspoonful three times a day after meals.

As an embrocation, equal parts of cod-liver oil and soap liniment were ordered. The patient was to wear warm flannels and take outdoor exercise. For the cough:

R Acid. sulphuric dil.,.....M xvj;
Tr. opii deodorat.,.....M viij.
Syr. pruni Virgin.,.....fl. ʒ j;
Aqua,.....fl. ʒ ij.

M. Sig. A teaspoonful or two every two or three hours.

A case of diphtheria in a child two years of age was given:

R Tr. ferri chloridi,.....fl. ʒ ss;
Acid. acetici dil.,.....fl. ʒ j;
Liq. ammon. acetat.,.....fl. ʒ j;
Syrupi,.....fl. ʒ ij.

M. Sig: A teaspoonful three times a day.

To be applied locally with a camel's-hair pencil:

R Comp. tr. benzoin,.....fl. ʒ ss;
Carbolic acid,.....gtt. x;
Glycerin, pure,.....fl. ʒ jss. M.

The liniment most frequently prescribed by Dr. Bruen for his dispensary patients is one cupful of vinegar, a half cup of turpentine, and the white of an egg well beaten together. As a stimulating liniment to the chest for pneumonia and bronchitis in children, this is excellent. His favorite antiperiodic in these cases is the citrate of iron and quinine. This is also often prescribed as a tonic in anemic conditions where malaria seems to be the cause.—*Correspondence Louisville Medical News.*

HYSTERICAL SPINE.—Speaking of "Hysterical Spine," Dr. Vincent gives the following very plain points as aids to diagnosis (*Med. Press and Circular*)—"We are all aware that, when any of the tissues of the body are, the seat of acute or chronic inflam-

mation, the pain which results is augmented by pressure; but the pain we are considering, and which is alleged by the patient to be "all down the spine," is not increased by pressure. For instance, if the patient is placed face downward on a firm mattress or couch, the whole weight of the surgeon's body transmitted to the spine by means of the open hand will give no pain; but, on the contrary, if the finger will be drawn lightly over the spinous processes, from the cervical portion down to the sacrum, we shall have a scream or sob, together with considerable cringing or flinching. So the apparent suffering of the patient bears no proper proportion to the pressure exercised. Another test producing a very characteristic symptom of these cases is to tap gently the spinous processes as the patient stands erect before you. The same flinching will be observed, and by these means one is often enabled to more or less localize the pain. The seat of this will generally be found in the lumbar region, especially if we can trace any uterine irregularity arising from any cause whatever. The second symptom is deformity. This may exist in various degrees, from being hardly noticeable to an extent simulating the worst form of lateral curvature; but, unlike that far more serious disease, the hysterical deformity can in a minute be reduced, although when the pressure or manipulation necessary for this is removed the deformity returns; yet for the moment it has vanished, and we have satisfied ourselves that there is no structural change. These two symptoms will generally be found sufficient to determine the nature of the case, especially if our diagnosis be assisted by the existence of any of those morbid conditions of emotional centers so well-known and recognized in the phenomena of hysteria."—*Med. Review.*

INTRA-UTERINE INJECTIONS IN THE TREATMENT OF PUERPERAL SEPTICEMIA.—T. Gaillard Thomas, M.D., in *N. Y. Medical Journal*, March 31, 1883, gives the following case, which seems to him to illustrate what should be the accepted treatment of puerperal fever, or puerperal septicemia, at the present day. The case was that of a lady in the higher walks of life whom I was called to see about a month ago, in consultation by her physician, a man of wide experience. She was a primipara, was taken in labor at 4 o'clock Sunday afternoon, and at 9 o'clock in the evening was delivered of a female child, without any difficulty or assistance. Her physician examined the external genitalia carefully, and found no tear whatever. The nurse was instructed to syringe out the vagina carefully the next day with carbolized water, which she did. The first 48 hours passed by without any bad symptoms at all, but, on visiting her on Tuesday morning, the physician found a temperature of 101° F., and in the evening it had risen to 102.5° . The next morning, the morning of the fourth day, the

temperature was 103° , and the patient began to complain of very severe pain in the right iliac fossa. There had been no chill. At 5 o'clock in the afternoon, the temperature was 106.5° in the mouth. The patient's appearance became wild, as of one who was about to have puerperal mania; the skin was hot, and she was crying out with pain, although she had received a good deal of morphine.

Having now been called to see the patient, I took the temperature in the mouth myself, and confirmed the record of her physician, that it was 106.5° . The pulse was 145. Making a vaginal examination, I found a bilateral laceration of the cervix uteri extending nearly up to the vaginal junction. Probably this extensive laceration partly accounted for the rapidity and the ease of the labor as occurring in a primipara. I urged that the uterus should be washed out with carbolized water at once, but her physician had never seen the method practised, and was strongly prejudiced against it; he finally consented only because it was apparent that unless something decided was done the patient would soon die. Using the Chamberlain tube and the Davidson syringe, Dr. Jones, and afterward Dr. McCosh, continued to wash out the uterus with carbolized water every four hours during the night, and the next morning the temperature was found to have sunk from 106.5° to 101° ; the pulse had fallen from 145 to 120; the patient, who had been given opium quite freely during the night, declared that she was very much relieved. Indeed, the relief had been so extraordinary that they began to believe that the danger was not real at all; that some exceptional circumstance had occurred, and that there was no septicemia. The uterus was now washed out at longer intervals, but at once the temperature went up to 102° , 103° , 104° , and 105° , and the patient again began to look maniacal. The uterus was now washed out every three hours, opium was freely administered, ten grains of quinine were administered every eight hours, ice-water was passed through a coil of rubber tubing placed over the abdomen; and as long as this treatment was kept up the temperature did not rise above 101° or 102° ; but so soon as they ceased to wash out the uterus the temperature at once rose to 104° , and at times to 105° . This fact was proved by repeated trials.

After this treatment had been continued for ten days, a physician remaining with the patient day and night, giving the injections every three hours, and thirty grains of quinine during the course of the day, it was believed to be time to stop it; but in less than 24 hours the temperature again rose to 105° . I mention the amount of quinine which was being taken particularly, so as to prove positively that there was nothing of a malarial character in the case at all. On the sixteenth day after deliv-

ery, the tenth day after the commencement of the high temperature, the intervals between the uterine injections were extended from three hours to four, then to five, six, and seven hours, and finally they were discontinued altogether, and at the same time the administration of quinine was given up and the coiled tubing was taken off. Opium was continued in small doses for a while longer, and the patient recovered entirely.

I wish to contrast this case with another which I saw just before—that of a woman who had been recently delivered of her third child. When I was called to see the patient the temperature was 106° ; she had been taken with violent pain in one iliac fossa, and had been put five days before pretty profoundly under the influence of opium, and a blister had been applied over the whole of the abdomen. Large doses of quinine had likewise been administered. When I saw the patient, the use of intra-uterine injections was begun at once, but the patient lived only 24 hours, and died in a state of coma.

It seems to me that the time has arrived when puerperal septicemia should be treated upon just as simple a plan as septicemia of any other kind is, namely, by washing with some antiseptic fluid the surface where the disease originates—some fluid which will remove the poisonous material which is being absorbed, and also, so far as possible, neutralize its poisonous qualities. In brief, I would say that puerperal septicemia, with our present light on the subject, should be treated in the following manner: First, wash out the uterine cavity completely with some antiseptic fluid; second, quiet all pain by opium; third, get the peculiar influence of quinine upon the nervous system; and, fourth, keep the temperature, at all hazards, at or below 100° by the methods which we now possess. Three years ago, at the American Gynecological Society, which met in Baltimore, I took the ground which I take to-day regarding this subject, and only one gentleman in the entire society supported my view. Every other member who spoke referred to the dangers of introducing air into the uterine sinuses during the injection, etc. But I believe that the dangers attending the use of the injections are counterbalanced by the benefits to be derived. I do not think there is the least probability that air will be introduced if a tube of large size—as large as the finger—is used. But when a catheter is employed there is some danger of inserting it into a sinus and introducing air and fluid together directly into the vessels.

REPARATIVE SURGERY OF THE GENITAL TRACTS
—Dr. M. A. Pallen of New York, in a paper on this subject, writes: All fallings of the uterus, from the slightest prolapse to the completest procidentia, necessarily involve more or less folding of the vagina upon itself; and, should the

substructure, the perineal conjunction, be absent, the process of vaginal folding ultimately becomes complete inversion. Without the necessary amount of time to properly discuss the relations of vaginal dislocations to the perfect integrity of the perinæum, I propose to formulate certain propositions.

1. Should there be perineal laceration, even if the uterine structure and circumuterine spaces be perfectly normal, the organ, sooner or later, necessarily sinks in the pelvis, most frequently in retroversion.

2. All perineal lacerations, from a simple sub-mucous muscular sundering (of the *transversus perinæi*, *sphincter*, and *levatoris ani* conjunctions), to a rent that extends into the bowel, necessarily beget vaginal dislocation, primarily as a slight, later as a complete rectocele, to be followed by a prolapse of the anterior wall, causing urethrocele and cystocele.

3. Urethrocele and cystocele seldom occur spontaneously; they ensue from pressure above (very rarely), or they follow from perineal sundering or laceration. I have never seen a case of cystocele, or even much urethrocele, that was not associated with some prolapse of the posterior vaginal wall.

4. All operative procedures for the *suspension of a prolapsed uterus must be directed mainly to the posterior vaginal wall*, because it arches upon the perinæum below and the uterus above, serving chiefly as a column of support. The anterior vaginal wall, being straight and shorter, serves rather for the support of the urethra and bladder, and being adherent to the pubo-vesical spaces, it prevents the full bladder from rolling the uterus in retroversion.

5. Operations restoring the integrity of the perinæum and posterior vaginal wall, usually develop symmetrical correlations of the canal. In cases of complete procidentia, a perinæum restored by plastic procedures which strengthen the recto-vaginal septum will eventuate in a permanent cure, a condition I have never seen in making operations confined strictly to the anterior vaginal wall.

These propositions assumed, I feel satisfied that very many successful issues of *perineo-vagino-plasty* prove that the theory upon which the operation was based is correct, viz., that the conjunction of the *transversus perinæi*, *sphincter ani*, *pubo-ischio-coccygeus*, and *levatoris ani* muscles, (described, but never actually demonstrated as the perinæum) is the true and correct foundation upon which the posterior vaginal wall rests, and that the *support rendered by the connective tissue in front of the rectum is but secondary, in consequence of the variable calibre of the bowel*. The anterior column of the vagina is straighter and shorter, and, as before said, mainly supports the bladder and urethra; but the posterior vaginal column, added to the masses of blood-vessels furrowing the peri-vaginal connective tissue, tends to support the uterus; therefore, when the basement support of the vagina (peri-

næum) gives way, it folds down upon itself, and drags the uterus in retroversion. I would state *en passant*, that I exceedingly doubt the efficacy of the so-called ligamentous support of the uterus, farther than the mis-named structures (broad ligaments) serve as vehicles for carrying masses of erectile tissue and blood-vessels; and that in the healthy female the uterine body maintains its normal plane, or it is lifted, or it is depressed therefrom, in consequence of plenitude or emptiness of these same blood-vessels. Furthermore, I am disposed to think that all misplacements, except from direct or mechanical causes, depend upon fracture or destruction of the connective tissue in the circumuterine spaces, because of pathological changes in the blood vessels.—*British Medical Journal*.

TREATMENT OF LUMBAGO.—Dr. Fraser says, in the *Lancet*: For the last eighteen months I have been adopting a very successful plan in the treatment of lumbago. While I held the office of resident physician in the Edinburgh Royal Infirmary, I frequently had occasion to perform the operation of cupping in Bright's disease of the kidneys. Some of these cases were attended with severe pain in the loins, and I was so impressed with the great relief from lumbar pain which followed cupping that I thought it might prove a valuable remedy in lumbago, and accordingly the next case of that disease which came under my care was cupped, and I am happy to say that the trial was rewarded with complete success. Since that time I have treated a large number of cases of lumbago by dry cupping, many of them with the disease in its most severe and aggravated form; and I have been able to give almost immediate and complete relief to most of them, and in no case have I failed to alleviate materially the suffering of the patient. I am convinced that this is a very valuable although simple plan of treating a very common, troublesome and painful affection. I find that the subcutaneous injection of sulphuric ether, chloroform or morphia locally is a valuable adjunct in the treatment of such cases, but in the majority of them the cupping alone is sufficient to give relief. This operation should be preceded and followed by the administration of a saline cathartic.

THE EXTERNAL APPLICATION OF BELLADONNA was resorted to by Dr. Costine (*London Lancet*), in a case of intestinal obstruction, and was followed in a few hours by a discharge from the bowels. There was obstinate constipation, no evacuation having taken place for fourteen days. Vomiting had occasionally taken place, and there had been much pain in the abdomen. Examination showed much distension of the belly, though the walls were not tense. There was occasionally a soft, defined swelling in the right iliac region about the size of the cæcum, but no lumps or bowel could

be felt; there was no hernia and nothing abnormal could be felt per rectum. A large quantity of fluid could be injected. The patient had taken all kinds of purgatives without effect. One grain of opium every six hours was ordered; also cold, strong beef tea and milk in small quantities often repeated. The next day there was freedom from pain and vomiting, but on the second day after, he was much prostrated, with a frequent and intermittent pulse and fecal vomiting. Six ounces of brandy in twenty-four hours and plenty of beef tea were ordered, and one ounce of belladonna ointment spread on a large poultice was applied over the abdomen, and frequently repeated. The belladonna was first applied in the afternoon, and the same evening the bowels were opened. He progressed favourably for several days, when constipation again took place, which castor oil failed to relieve, but with the external application of belladonna, and opium internally, removed.—*Weekly Med. Review*.

THE TREATMENT OF SYPHILIS BY INDIANS.—Dr. J. Marion Sims gives the following as the ingredients of a decoction used with great success by the Creek Indians in treating syphilis:—"Fluid extract of *Smilax sarsaparilla*, fluid extract of *Stillingia sylvatica* (queen's delight), fluid extract of *Lappa minor* (burdock), fluid extract of *Phytolacca decandra* (poke root), aa ʒij; tincture of *Xanthoxylum carolinianum* (prickly ash), ʒj. Take a teaspoonful in water three times a day before meals, and gradually increase to tablespoonful doses. In making the fluid extracts, there is some risk of getting a remedy less efficient than the original Indian decoction, because the manufacturer may use roots that have been kept too long, and lost some of their active principles, while the decoction used on the plantations was always made of fresh roots just gathered from the woods. In making the fluid extracts, we should therefore be careful to have them made from roots recently gathered."—*Brit. Med. Jour*, March 10, 1883.

CORROSIVE SUBLIMATE IN CATARRH.—Bichloride of mercury, in a solution of one grain to the pint of water, to which two ounces of cherry laurel may be added, is recommended by Dr. J. N. Mackenzie (*Maryland Medical Journal*) in the treatment of inflammatory conditions of the nose and throat with profuse muco-purulent secretion. Crusts that may be present and tenacious mucous should be removed from the surfaces, which should then be sprayed with an atomizer provided with suitable tubes. He regards it as a most valuable disinfectant in ozone and fœtor of the breath from pharyngeal disease. He found it successful in his own case in abating an acute coryza, and had good results in treating chronic nasal catarrh.—*Western Medical Review*.

TREATMENT OF CEREBRO-SPINAL MENINGITIS.—Prof. H. C. Wood, in a clinical lecture in the *Med. Gazette*, sums up as follows: During the first three or four days in the strong and robust, leeches or cups may be applied to the temples or nape and upper part of the spine. Ice-bags are applied to head and back of neck for first days—in many for a week. To relieve headache, restlessness and delirium, bromide of potash is the best agent, gr. 20 to 30 every three hours. Its efficacy is increased by adding chloral (ten grain doses usually) or in those who cannot take chloral, tinct. hyoscyami (drachm doses). It is advantageous to add also tincture of castor (drachm doses) in the hysterically inclined. If possible don't use opium, but sometimes it becomes necessary, as the remedies already named occasionally fail. The temperature is not apt to run over 104° (a very harmless height) in adults except at the close, and quinine is not indicated; moreover, it has no effect in lowering the temperature in this particular disease. The best way to lower temperature, if this be an object, is by cold affusions, cold and tepid baths, or the cold pack.

CAUTERIZATION OF THE CLITORIS IN HYSTERIA.—The late Professor Friedreich, shortly before his death, had prepared a paper, which has since been published, on this subject. In many cases of obstinate and severe hysterical affections he has found that cauterization of the clitoris by nitrate of silver has had the most beneficial effects. The cauterization must be severe, as slight superficial cauterization tends rather to aggravate the disease. The pain is at first severe and during it the patient must remain in bed. Among the cases which he gives as cured with extreme rapidity by this method are—one of paraplegia, which had lasted for a year and a half; hysterical aphonia, lasting for two years; glossoplegia, lasting for four months; tonic spasm of the spinal accessory, lasting for seven months; and several cases of general severe hysterical convulsions.—*Virchow's Archiv.* and *Practitioner*.

FORCIBLE REMOVAL OF UTERUS, AFTER LABOR, BY A MIDWIFE.—A case is reported in the *British Medical Journal*, by Dr. Cane, in which the uterus and some of its appendages were torn away by a midwife. Mrs. B., 29 years of age, in delicate health, had her first child five years previously, subsequently two miscarriages, due to acquired syphilis. Attended by a midwife, death occurred shortly after delivery. It was found upon examining the placenta, which had been removed by the midwife, that there was attached to it a mass which proved to be the inverted uterus, an inch of the upper part of the vagina, both Fallopian tubes, the right ovary, and half of the left one. The uterus appeared to be healthy and the ovaries normal.

TREATMENT OF DIPHTHERIA.—Dr. J. J. O'Dea, of Stapleton, N. Y., recommends the following, and, as he claims, successful local treatment of diphtheria: To the entire inflamed surface surrounding the false membrane, and close up to its border, he applies by means of a cotton-wad the following solution. R. Argenti nitrat. cryst., ʒ j.; spt. æther. nit. dulc., ʒ iv.; aquæ destill., ʒ iv., M. In the same manner he then makes an application of the following mixture to the surface of the false membrane, and out to its extreme edge, but no farther: R. Acid. carbol., grs. viij.; liq. ferri sub-sulph., ʒ ijss.; acid. sulphurosi., ʒ ijss.; glycerinæ, ʒ j. M. These are to be repeated twice, or possibly three times in twenty-four hours, the second mixture to be supplemented by a gargle of lime-water, thus allaying irritation and removing the *débris* of false membrane broken down by the action of the acid. When nothing remains of the deposit save some milky white patches he omits the applications and employs only the lime-water gargle of spray.—*Am. Med. Digest*.

LOCOMOTOR ATAXIA SUCCESSFULLY TREATED BY ELECTRICITY.—At the meeting of German physicians and scientists at Eisenach (*Berlin Klin. Woch.*), Dr. Th. Rumpf reported two cases of locomotor ataxia greatly benefitted by the use of faradic electricity applied with the brush, and in whom the symptoms had not returned after several years. He uses a current not quite strong enough to cause pain. One pole (the anode) is applied to the sternum; the other (the cathode), represented by the brush, is applied in rapid succession to the back and lower limbs. The duration of the application is ten minutes. The effect upon the lancinating pains is quite marked, and common sensation is greatly improved. In cases where the disturbances of sensibility and pain are very marked, and the disease is not too far advanced, this method gives praiseworthy results, which are unattainable by the older methods of treatment.—*Medical Times*.

OLEOZE, THE GERMAN MIXTURE.—Oleoze, so great a favorite in disguising unpleasant remedies, and making most compounds pleasant to smell and taste, is as follows: One part each of the oil of lavender, cloves, cinnamon, thyme, citron, mace, and orange flowers, three parts balsam of peru, and 250 parts of spirits. It is not found in any English, French, or American work. *Am. Med. Weekly*.

PATENT MEDICINES IN ITALY.—A law has just come into force in Italy which prohibits the sale of patent medicines throughout the kingdom unless the precise composition of the medicine is stated. This important decree has been promulgated by the Minister of the Interior, the customs, and the sanitary authorities.—*Medical Times and Gazette*.

THE CANADA LANCET.

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MODERN MODES OF LIVING.

What shall we eat and drink, and wherewithal shall we be clothed? These problems have been of absorbing interest ever since Adam and Eve, through their own disobedience, were driven out of Eden, and forced to earn their bread by the sweat of their brow. In each succeeding generation these questions appear to have received added importance, and to have kept pace with man's progress towards a higher and still higher civilization. At each milestone of his journey down through the ages, it has been man's good pleasure to enlarge his bill-of-fare and amplify his wardrobe. Thus, by slow degrees, he has created a plan, or system of living, wonderful for its complexity if not for its perfection. So true is this that scarcely a trace of primitive methods remains. Man now lives very much in accordance with devices of his own invention, instead of the simple, but ample provisions, made for his wants by the Creator. Adam and Eve, clothed in leaves, surrounded by their little ones, all reclining on nature's carpet, the sole article of furnishing in a dwelling whose walls were of vines and roof the ample branches of a fig tree,—partaking of a simple meal of fruits and milk, present a scene worthy the genius of an artist, and a grotesque contrast to the elaborate dress, elegant dining halls and groaning tables of later times. While but few civilized persons would advocate a return to primitive ways, yet the opinion is general, that modern methods are too artificial, and mark a wider departure from primitive customs than is compatible with physical and moral perfection.

The antediluvians do not appear to have suffered in either health or longevity from the simplicity of their mode of living.

The primary objects of eating and drinking are development and sustenance. Hunger and thirst are the signals for a fresh supply. To these natural sensations man adds another, namely, the gratification of the special sense of taste. If we leave out of view those who have not supplies at hand at all times, civilized people seldom eat from sheer hunger—they more often eat to perform a set act, or to gratify an acquired and therefore an unnatural appetite. Eating three or four times or oftener in the twenty-four hours, as most of us do, never allows the stomach to get empty. Natural hunger and keen relish of plain substantial food are conditions not to be looked for under such a high-pressure system of feeding. A stomach yet struggling with the remains of the breakfast beefsteak cannot be expected to have a craving for the dinner roast; but modern cooking, with the aid of the palate, is equal to the occasion. It matters not that the stomach has not yet unburdened itself of its last load, or that the whole system behind it is surfeited with *paulum* but half elaborated, the hour for refreshments has arrived and the stated work must be performed; and performed it generally is, strange as it may appear, with evident enjoyment. But to the cook belongs the credit. When the stomach is for some time empty, and the whole system has unloaded itself and is working lightly and smoothly, hunger is experienced, and when it has reached a proper height but little of the refinement laid down in the cookery books need be regarded in the preparation of the meal, provided the food offered is nutritious and wholesome. To a healthy constitution, hunger is natural, and if the sensation is never experienced, as happens in the case of most who live in the manner referred to, it is because the owner of the stomach overrules it to an extent which prevents nature from proclaiming her own wants. Hunger being a natural law, every person should seek to so regulate his habits as to perpetuate it and to cause its return when lost. Many dyspeptics experience a desire for food which they call hunger, but it is a misnomer; the sensation is false and the result of over-indulgence at the table. It is important to discriminate between false and true hunger. Real hunger indicates a stomach prepared to receive a fresh supply; it indicates a

system in good working order and in readiness for its task. It has unloaded itself of its previous burden, and is now tendering for a fresh contract, which it promises to perform speedily and well.

Since man, like every other animal, lives by eating, it is evident that eating is a matter to be carefully examined—a duty to be naturally and properly performed. The question involves not only immediate but also remote consequences. Every physician knows that disorders of the digestive organs are extremely common, and are yearly becoming more so. The higher the civilization, and the more abundant is food, the more commonly do such troubles prevail. It is probably not too high an estimate to say, that half the adult population of civilized countries are afflicted more or less with imperfect digestion. Imperfect digestion means impure blood, imperfect nutrition and deranged organic function, which sooner or later undermines health and leaves the system an open prey to one or more of the numerous diseases flesh is heir to. By common consent malnutrition is credited with most of the disease and suffering met amongst mankind. But whence cometh this malnutrition? Is it a disease of itself, or does it proceed from antecedent causes? There can be no doubt that faulty digestion precedes both general and local malnutrition in nearly all cases of a general character. Hence faulty digestion is the primary cause of most of the diseases to which man is so ready to fall a prey. Infectious diseases aside, persons of good digestion, as indicated by robustness of constitution, do not readily take a disease, and in the midst of a useful life, bid adieu to all that is dear on earth, and shake off the mortal coil. On the contrary, such persons, as a general rule, live out their days, and die only after passing their allotted three score and ten years. But good digestion, under an over-ruling providence, does it all.

But eating has a moral as well as physical side. As a person by eating naturally and rationally may eat himself, so to speak, into good health, and the happy, joyous spirits which bodily vigor confers, so by eating unnaturally and irrationally, a person may eat himself into ill health, ill nature, unhappiness, and even crime. Unkind words, domestic jars, and social discords, are, in no small degree, due to imprudent eating. Indeed, so long as faulty digestion continues to prevail to any considerable extent, just so long will domestic disquiet and social

discord continue to drive happiness from our homes and peace and good-will from society. What to eat, and how to eat, we claim, are questions of the most vital interest to each individual and to society at large, and more worthy the attention of the hygienist and philanthropist than most people imagine.

MEDICAL COLLEGE FOR WOMEN.

In our last issue we alluded to the proposed inauguration of a medical college for women in Toronto. Since then Dr. Barrett has been actively engaged in the work of organization, and we are enabled to give the names of the new Faculty. A suitable building will be procured in the vicinity of the Toronto General Hospital, and it is proposed to open the School on the 1st of October next. The following are the names of the Faculty:—Dr. Barrett, President and Professor of the Institute of Medicine; Dr. Geo. Wright, Practice of Medicine; Dr. Adam Wright, Obstetrics; Dr. I. H. Cameron, Surgery; Dr. McPhedran, Materia Medica; Dr. Duncan, Anatomy; Dr. Reeve, Eye and Ear; Dr. Krauss, Medical Jurisprudence; Dr. Nevitt, Sanitary Science; Dr. Augusta Stowe, Demonstrator of Anatomy; and Mr. Pyne, Chemistry.

There should be no difficulty in the way of forming a medical Faculty for such an institution in Toronto, and therefore we very much question the propriety of selecting members from the Toronto School of Medicine, when there are many fully qualified medical gentlemen outside of the School who would be very glad to fill these chairs, and who should, in all fairness, have an opportunity. We also venture to think that a mistake has been made in breaking with Dr. Jenny K. Trout, who was prepared to donate \$10,000 on conditions which, when properly understood and explained, are not at all unreasonable. As matters are at present, it seems not improbable that another School will be inaugurated under the terms laid down by Dr. Trout, with ample funds, and conditions more likely to secure the sympathy of lady students than the one above mentioned. We cannot but feel that Dr. Barrett has made a fatal blunder, when a little tact was all that was necessary to have made success beyond peradventure. We also learn, through the local press, that the medical staff of the Kingston College purpose opening a separate medical school for women in October next.

ONTARIO MEDICAL ASSOCIATION.

The members of the Ontario Medical Association and others are reminded that the Third Annual Meeting will be held in the Canadian Institute, Toronto, on the 6th and 7th of June.

The papers, as will be seen below, are both numerous and varied, and the secretary has received a number of letters from all parts of the Province, indicating increased interest in the approaching meeting. We hope to see a large attendance of the profession at this meeting, and especially the younger members, who cannot fail to be greatly benefited by contact with those who have had greater experience. Young men who locate in country towns and villages, are too apt to settle down to a set routine, become rusty and filled with local prejudices; such would be greatly benefited by that friction of mind upon mind which is so well calculated to promote healthy mental development.

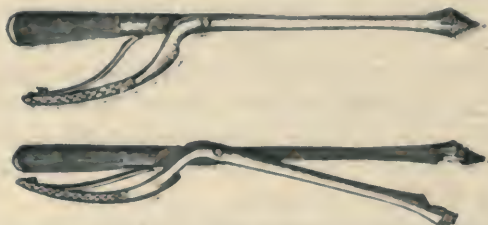
Arrangements have been made by the Secretary with the different railways to bring members and their families at greatly reduced rates, and we trust advantage will be taken of this courtesy on the part of the various railway companies, by members of the profession both young and old. It is also hoped that the members will endeavor to secure pathological specimens for the formation of a museum in connection with the Association. The committee appointed for the purpose of reporting on the desirability and feasibility of establishing a museum and library, have taken action on the matter, and will be prepared to report in favor of the establishment of a museum. The question of founding a library will have to be postponed, at least for the present. We give herewith the titles of the papers received up to the 25th ult., to be read at the forthcoming meeting.

Neurotomy in Traumatic Tetanus, by Burt, Paris; New Method of Removing Solid Adherent Ovarian Tumors, by Groves, Fergus; Bacilli of Phthisis, by Graham, Toronto; Hip Joint Disease, by Ferguson, Toronto; Cancer of the Larynx, by Ryerson, Toronto; Uses of Jaborandi, by McKay, Woodstock; Treatment of Palipes, by Burrows, Lindsay; Cases of Poisoning, by Mitchell, Enniskillen; Local Boards of Health, by Oldwright, Toronto; Aphasia, by Workman, Toronto; Primary Lateral Sclerosis, by Campbell, Seaforth;

Fatty Diarrhœa, by Woolverton, Hamilton; Medical Ethics, by Dupuis, Kingston; Anomalous Nervous Disease, by C. K. Clarke, Kingston; Value of Vaccination, by Playter, Toronto; Fractures of the Fore-arm, by McNaughton, Erin; Prurigo, with case, by McPhedran, Toronto; Acetonæmia, by Strange, Toronto; Translation on the new Microbes, by Covernton, Toronto.

These, with several others too late for mention here, together with the Reports, which this year promise to be very good, will form ample matter for discussion during the session.

SIMPSON'S BASILYST.



We herewith show the instruments used by Prof. Simpson, of Edinburgh, in the performance of what he terms basilysis, a description of which will be found in our last issue. Figure 1 shows the basilyst closed, as when it is being screwed into the bones. Figure 2 shows the instrument opened, as when the bones are being torn up. It does not cost more than the perforator in common use, and has the immense advantage that, whilst it as easily and effectively perforates the vault of the cranium, it can further break up the unyielding base, and thus in many cases render us independent of any further head-crushing implement or apparatus.

BEEF PEPTONIDS.

This concentrated nutriment was first prominently brought to the attention of the medical profession in an article in the *New York Medical Record*, July 15th, 1882, entitled, "Feeding per Rectum," in which its value was tested in several cases, among which was that of the late President Garfield. In this case particularly, from the close attention bestowed by the physicians in charge to everything used for the sustenance of their distinguished patient, its excellence as a nutritive agent for feeding per rectum was most clearly marked,

while in the history of the other cases given, its value is exhibited when administered per orem.

This preparation contains all the soluble constituents of beef, *partially digested*, combined with gluten of wheat. The nutritive power of gluten is well known to be very great, for it has within itself such a variety of alimentary principles that animals are well nourished and can live indefinitely on it when taken as the sole article of food. Therefore it is plain, that combining this nutritive factor with the albuminoids and fibrinoids of beef, places within our reach a nourishment for feeding, per orem and per rectum, of considerable importance. Rectal alimentation has not heretofore received the attention it deserves, but there cannot be any doubt of its great value in many cases met with in the practice of every physician. In addition to the nutritive properties of beef peptonoids, it possesses sufficient peptone to materially assist the digestion of any food when administered at the same time, a fact that enhances its value considerably.

WILLIAM EDWARD SCOTT, M.D.

As we go to press we learn with deep regret of the death of Prof. W. E. Scott, of McGill Medical College. Dr. Scott was one of the most prominent physicians in Montreal, and has been connected with McGill College for upwards of thirty years. He held the professorship of anatomy for 15 years. During the last 26 years he held a prominent position on the attending staff of the Montreal General Hospital. He was born in London, England, and emigrated to Montreal at an early age. We are informed that he had a complication of diseases, but kidney disease was the principal affection. The disease appears to have run a rapid course. Many of our readers who attended the meeting of the Canada Medical Association in Toronto last year will remember his being present, apparently in good health. He bore his illness with becoming patience and looked forward to the end with great calmness. He took an active interest in all that pertained to the highest welfare of the medical profession. He was greatly respected by all who knew him, of a kind and generous disposition, a faithful friend, a loving father and devoted husband. His death will leave a blank not readily filled. Many who knew him intimately will mourn his loss as of a

true friend and brother. Large-hearted, frank and considerate, it may with truth be said "he was one of nature's noblemen." His family, consisting of his wife, three sons and a daughter, have our deepest sympathy in their great affliction.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the College of Physicians and Surgeons of Quebec was held in Montreal on the 9th ult., Dr. R. P. Howard in the chair. Dr. Henry H. Knox, of Portage du Fort, was the only successful candidate for professional examination. Seventy-seven candidates presented themselves for preliminary examination. The following are the names of the successful candidates: Messrs. H. A. Lafleur, E. H. Blackader, W. G. Stewart, A. W. Gardner, — Beique, W. Christie, R. Kirkpatrick, J. Langlois, G. C. Stephen, A. Couturier, A. Cowie, T. Mayrand, C. V. Poitras, J. F. Friganne, A. Guy, C. J. Edgar, J. Edge, J. G. Lamarche, P. Briere, L. J. A. Mignault, J. C. Mars, H. Marchand, J. B. Richard, T. C. Blondeau, C. A. Dugas, G. W. Lacombe, D. J. Page, E. Bittner, W. Joyal, L. Rochette, H. Garceau, A. Hudon, E. Lebreque, C. V. Marsil, J. Marchand, P. Pellard, P. Pelletier. This meeting is the last of the Board. A new election will take place in Quebec on the 11th of July next.

MONTREAL SCHOOL OF MEDICINE.—The following gentlemen belonging to this school received the degree of M.D. in Victoria University on the 11th ult.: — Prevost J. G., Chartrand J. P., Bigouesse J. A., Rioux J. F., Panneton E. F., Moll L. A., Chaffery J., Morency N., Simard E., Rohman H., Chagnon J. S., Vaillancourt R. L., Garrault S. J., Brien A. A. E., Ouimet A., Poitevin E. A., Salvail N., Etue A. Z., Theriault J., Clerk C. F., Mathieu H., Lacoursiere H., Craig L. C. S., Paquet E. G., Geoffrion J. Th., Largis H. E., Bastien J., Archambault H. A., Beaupre J. O. A., Prevost Gu. F., Goulet J. B. A., Allard O. H., Watier G. W., Peladeau J. Th., Brisebois J. M., Ledair E. A., Lessier C., Pepin J. A., Camiere L. J., Prudhomme R., Seguin A.

MCGILL COLLEGE, MONTREAL.—The following are the changes and appointments that have been made in the above-named College: Dr. James Stewart, of Brucefield, Ont., has been appointed

Prof. of Materia Medica and Therapeutics *vice* Dr. Wright, resigned. We congratulate both Dr. Stewart and the College upon this appointment. No better man could have been chosen for the position. Dr. D. C. McCallum has resigned the Chair of Obstetrics and Diseases of Women and Children, owing to press of other professional duties, and Dr. A. A. Browne has been appointed Prof. of Obstetrics, and Dr. W. Gardner Prof. of Gynæcology. Dr. Geo. Wilkins, of Bishop's Medical College, has been appointed Prof. of Medical Jurisprudence, and Dr. R. L. McDonnell Lecturer on Hygiene.

BISHOP'S MEDICAL COLLEGE.—The following changes and appointments have been made in this institution in addition to those mentioned in our last issue. A very important change has been made with regard to the teaching in anatomy, on which no systematic class lectures will be given in future. The entire teaching will be in the form of demonstrations, in the dissecting room. Dr. Trenholme has been appointed to the chair of Gynæcology; Dr. McConnell will lecture on Materia Medica and Botany, and Dr. H. L. Reddy on Therapeutics. Dr. Armstrong has been transferred to Physiology, and Dr. Foley to the chair of Anatomy. Dr. C. A. Wood has been transferred to the chair of Pathology, and Dr. Wm. Young has been appointed Prof. of Chemistry.

HALIFAX MEDICAL COLLEGE.—The following gentlemen have passed the final examination in this College: *M.D.*—J. A. Sponagle, G. H. Fulton, and D. N. Morrison. *Primary*.—A. N. Cogswell, F. W. Goodwin, A. C. Hawkins, J. W. Read, J. M. Gourley, J. McKenzie, T. C. Lockwood, and A. J. Weir. *Prizemen*.—Prize for best final examination, J. A. Sponagle; prize for best primary examination, F. W. Goodwin; Anatomy prize first year, A. J. Fuller.

OBSTRUCTION OF THE BOWELS.—Dr. J. D. Hunter, of Arequipa, Peru, reports in the *Practitioner* a case of obstruction of the bowels which was relieved by the introduction of the hand into the rectum. The hand was passed to the extent of sixteen inches, and the obstruction overcome by dilatation with the fingers. The patient made a rapid and continuous recovery.

TORONTO UNIVERSITY.—The following are the results of the recent medical examinations:—

First Year.—A. W. Bigelow, C. G. Campbell, J. C. Carlyle, W. P. Caven, W. J. Gregg, H. J. Hamilton, D. R. Johnston, H. E. R. Little, J. McCoon, J. Martey, D. McKenzie, C. T. Noecter, S. G. Parker, J. W. Peaker, G. A. Peters, A. F. Woodward. *Second Year*.—H. Bascom, E. Bourke, A. Broadfoot, F. W. Kane, L. Carr, G. H. Carveth, G. A. Cherry, J. D. Courtenay, H. N. Hoople, J. H. Howell, A. B. Kinsley, C. A. Krick, D. J. Minchin, D. Pool, M. R. Saunders, D. M. Staebler, J. G. Sutherland, H. E. Webster. *Third Year*.—J. Bray, J. W. Clerk, J. S. Draper, R. Hearn, J. Johnston, A. F. McKenzie, J. W. Patterson, J. Spence, R. L. Stewart, S. Stewart, A. S. Thompson. *Primary*.—G. A. Bingham.

M.B.—H. S. Clerk, F. J. Dobson, J. E. Hensler, J. A. Meldrum, W. J. Robinson, W. H. Carlton, W. Cuthbertson, W. F. Freeman, W. J. Lepper, T. D. Meikle.

M.D.—R. E. Clapp. Scholarships and Medals. —*First Year*—1, D. R. Johnston; 2, G. A. Peters. *Second Year*—1, L. Carr; 2, H. N. Hoople. *Third Year*—1, J. W. Clerk; 2, J. Spence. *Fourth Year*—Gold medal (Univ.), W. J. Robinson; silver, F. J. Dobson; gold medal (Starr), W. J. Robinson.

NEW TEST FOR GLUCOSE.—Dr. Geo. Johnson in the *LANCET* for Nov. 18, gives his experience and experiments regarding a new test for grape sugar, whether in the urine or elsewhere. It consists in boiling with an excess of liquor potassa a specimen of diabetic urine (Moore's test), then, adding a few drops of a saturated solution of picric acid, which instantly changes the brown coloration to a deep purple color. The effect of the picric acid would seem to be to intensify the reaction between the caustic potash and the sugar.

CORROSIVE SUBLIMATE AS AN ANTISEPTIC.—In the number of the *Medical News* for May 5th, is an article by Dr. R. F. Weir, of New York, on the use of corrosive sublimate as an antiseptic. His attention was first drawn to it by a statement by Delacroix, that it was an effective germicide in the strength of one part to 2,500 parts of water, being 250 times more powerful than carbolic acid. He used it in one part to 2,000 of water and in some cases even stronger, with very satisfactory results.

ANÆSTHETIC MIXTURE.—In the CANADA LANCET for May, 1882, page 286, will be found a paragraph on the "dangers of anæsthesia," in which is given the mixture used by Dr. Henry Smith, of London. He claims that it is comparatively safe and equally as efficacious as any other. The mixture consists of one part of alcohol, two of chloroform and three of ether. It may be easily remembered from the circumstance that the initial letters of the substances are a.c.e., and the proportionate quantities are 1, 2, 3, respectively.

LIGATION OF THE INNOMINATA.—Mr. Mitchell Banks, of the Royal Infirmary, Liverpool, recently tied the innominate artery for aneurism of the second part of the subclavian artery. The common carotid was also ligated. Kangaroo tendons were employed as ligatures, and strict antiseptic precautions were carried out. The patient left the infirmary much improved. This is the twenty-third case in which the innominate has been tied; twenty-one of which were fatal.

RESORCIN AS A SUBSTITUTE FOR QUININE.—This new drug has been much written about lately, especially in Europe, and has come to be regarded as a most efficient substitute for quinine, in the treatment of intermittent fever. It is a substance closely allied to phenol, and is prepared by fusing potassium benzol disulphate with caustic potash. The dose is from thirty to forty grains. One special advantage of resorcin is its cheapness.

SKIN DISEASES.—Free clinics are given daily at the Hospital for Skin Diseases, Philadelphia, by Dr. Shoemaker, the physician in charge. A great number and variety of cases are treated at this hospital, and those who may desire to attend will gain a practical knowledge of these diseases, not obtainable in private practice. Physicians and advanced students are always welcome, either as visitors or for the purpose of attending the free clinics.

HEAVY BRAIN.—James H. Madden, the noted gambler, who died recently in Leadville, Colorado, had the heaviest brain ever weighed in the United States. Its weight was sixty-two and a quarter ounces. Cuvier's brain weighed rather more than 64 ounces; Dr. Abercrombie's 63. These are the heaviest on record.

BORAX AND GLYCERINE IN ERYSIPELAS.—In the *Medical Times* (Phila.), will be found an article on the treatment of erysipelas, in which the writer recommends the local application of borax dissolved in glycerine in the strength of one drachm to the ounce, and applied on linen. The writer speaks from an experience of eight years, and claims that it cuts short the disease in a remarkable manner.

THE LATEST REMEDY FOR CANCER.—Finely powdered ergot has been used with great benefit by Dr. W. A. Collins, (*Cin. Lancet and Clinic*) in all cancerous ulcerations. The powdered ergot is applied three times a day to the surface of the ulcer. After each application a muslin rag wet with carbolic acid lotion is applied. The Dr. claims to have had unlooked for results from its use.

DISGUIISING IODOFORM.—The *Western Medical Reporter* gives the following plan of disguising iodoform:—For patients who have to use iodoform for certain purposes, it is advised to spread some of the ointment on muslin and bandage a finger with it. Thus the purpose for which the agent is used can be concealed.

SODIUM HYPOSULPHITE IN FETID BRONCHITIS.—Dr. Lancereaux, (*Bull de Thérap*) has drawn the attention of the profession to the value of the hyposulphite of sodium in the treatment of this fatal disease. He gives it in doses of from 60 to 80 grains daily. The fetid secretion is gradually diminished, the weight of the patient increases and a perfect cure is effected.

OVARIOTOMY IN AMERICA.—Dr. Burgess, of San Francisco, Cal., has had a series of fifteen successful cases of ovariectomy. This would seem to be an answer to the statement that, from climatic or other causes, the results in abdominal surgery on this continent are not as good as in England.

BRITISH MEDICAL BILL.—This bill, which has yet to pass the House of Commons, will not come into force until April, 1884. There is, therefore, ample time for those who desire to obtain British registration, to enable them to practise in Ontario, to do so.

CANADIANS ABROAD.—John Howard Betts, M.D., Kingston, has passed the examination of the Royal College of Surgeons, Eng., and was admitted a member on the 16th of April. H. W. Aikins, M.D., of Toronto School, F. G. Finley, M.D., of McGill College, and Drs. W. Nattress and W. H. McDonald, of Trinity Medical College, have passed the Primary examination of the Royal College of Surgeons, Eng.

BROMIDIA AS A HYPNOTIC.—Dr. Richard McSherry, Prof. of Principles and Practice of Medicine, University of Maryland, Baltimore, says: "I have used the preparation known as bromidia, prepared by Messrs. Battle & Co., of St. Louis, in my practice, and have found it a very satisfactory agent in cases for which it is deemed most appropriate."

APPOINTMENTS.—Prof. McLean, of Ann Arbor, has been appointed Surgeon-in-chief of the Michigan Central system of Railroads. Dr. J. M. Barnaby has been appointed member of the Board of Health for Bridgetown, N.S. Jas. Weir, M.D., of Kennetcook, has been appointed Commissioner of Schools for the district of East Hants, N.S. J. A. Sponagle, M.D., has been appointed House Surgeon of the Halifax Hospital, N.S. Drs. B. H. Scott and T. D. Meikle, of Trinity Medical School, and J. S. Draper and J. R. Patterson, of the Toronto School of Medicine, have been appointed assistants to the in-door Medical Staff of the Toronto General Hospital.

DR. SHEPHERD has been appointed on the indoor staff of the Montreal General Hospital, *vice* Dr. Wright, resigned, and Dr. McDonell on the outdoor staff. Drs. J. J. Gardner, W. G. Henry and J. Gray have been appointed on the resident staff.

DRS. J. Cameron and D. Chisholm of Port Hood, have been appointed members of the Board of Health for District No. 4, Co. Inverness, N.S.

WESTERN UNIVERSITY, MEDICAL DEPARTMENT.—The following changes and appointments have been made in connection with this medical college. Dr. Arnott has been appointed the representative of the school in the Ontario Medical Council. Dr. Wishart has been appointed Prof. of Clin. Surgery, Dr. McGuigan registrar, and Mr. W. Saunders secretary.

QUESTIONS AND ANSWERS.—In the September number of the LANCET page 20, it is stated that the injection of carbolic acid is good treatment for hemorrhoids if properly done. How should it be done? Ans.—The strength is one of carbolic acid to six of glycerine, and six of water; of this *five* minims are injected into each tumor at intervals of a week.

* * We received \$3 on the 4th ult., on account of subscription to the LANCET, but as neither name, date nor post-office address accompanied it, we are at a loss to know to whom we should credit the amount.

We regret to learn that both Dr. Purdy of Hope-well Corner, N.B., and his son who was attending the college at Mt. Allison, have been seriously ill of diphtheria, but we are pleased to know that they are in a fair way of recovering.

CORONERS.—Dr. D. E. Berryman has been appointed Coroner for St. John, N.B. Dr. A. B. Gaviller, of Luther, has been appointed Coroner for the Co. of Dufferin, Ont.

MEDICAL BARONET.—M. T. Spencer Wells, of London, Eng., the celebrated ovariologist, has been made a baronet.

Books and Pamphlets.

FORTIETH ANNUAL REPORT OF THE STATE LUNATIC ASYLUM AT UTICA, NEW YORK, FOR THE YEAR 1882.

This is decidedly the most able and instructive asylum report we have ever had the privilege of perusing. It is truly much to be regretted that the contents of such valuable public documents become so little known to the general public, or that, as a rule, the journalistic press so persistently abstains from reproduction of those portions which convey that sort of information which is most, and too often most lamentably, needed by a large proportion of every community. Insanity, just as religion and politics, would seem to be a subject on which every man, and not a small percentage of women, deem themselves perfectly competent, on all and sundry occasions, to dilate with nothing short of hierarchal authority; and whilst those best qualified by long experience and thorough study, to enunciate rational views, are always slow

and cautious in their decisions, the intuitively learned class never hesitate to pronounce their judgment on even the most obscure and perplexing cases.

The medical superintendent, John P. Gray, M.D., of the Utica Asylum, after a residence of 30 years among the insane, in which time more than 12,000 patients have passed under his observance in his own establishment, to say nothing of the ample opportunities availed of by him in his visitation of a multitude of other insane asylums in his own country and over a large extent of Europe, may surely be regarded as a person fairly qualified to express a well-matured and trustworthy opinion on the most important questions connected with asylum administration and the true interests of the insane; and assuredly his present report affords satisfactory proofs of his competency in these relations.

Most cheerfully, did our space or the recognized sphere of action of a medical journal warrant the indulgence, would we lay before our readers some of the more interesting passages of Dr. Gray's able production; but in truth these are so numerous as to render selection alike puzzling and justly impracticable. Above twenty pages are devoted to quotations from the evidence given before the committee of the Imperial Parliament in 1877, which was instructed to "inquire into the operation of the lunacy law so far as regards the security afforded by it against violations of personal liberty." When it is stated that the witnesses examined were Mr. Perceval, secretary of the Lunacy Commissioners; James Wilkes, Commissioner of Lunacy; Dr. J. Crichton Brown, Dr. John Bucknill, Sir James Coxe, Dr. Maudsley, Dr. D. Williams, and the Right Hon. the Earl of Shaftesbury, all gentlemen of the highest standing and most thorough experience, the public might rest assured that the opinions expressed were sound and practical, and they all concurred in the belief that the security of the personal liberty of Her Majesty's lieges needed no additional protection, and that the less the existing lunacy law was tinkered with the better. Lord Shaftesbury, in reply to the question, "Do you consider that the facility with which patients are admitted into asylums is not too great at the present time?" gave the following strong reply: "No, certainly not. I think that the whole of our experience confirms us in the opinion that it

is not. We stated so in 1859, and we state it still more emphatically now. I cannot recollect a single instance in which a patient has been brought into any asylum in whose case there were not sufficient grounds for saying that he was a proper subject for care and treatment; I can hardly recollect a single instance." Such decisive and clear language, from a man so eminent as the Earl of Shaftesbury, and after fifty years' experience as a lunacy commissioner, is surely entitled to very high consideration. We cannot refrain from another quotation which we regard as a very marked tribute of respect to the medical profession at large. His lordship being questioned as to the general merits of medical certificates of insanity, testified as follows:—

"It is very remarkable, taking it altogether, that the certificates have been so sound, considering the great number that have been given every year; of course we must admit that they have been signed by medical men who have no very extensive knowledge of lunacy, but it is certainly very remarkable that the number of certificates which have passed through our hands since 1859—the date of the last committee—amounts to more than 185,000, and yet of all those certificates, I do not think so many as half-a-dozen have been found defective."

We commend the above words of Lord Shaftesbury to the deferential consideration of that class of our Canadian sentimental philanthropists who find pleasure in detraction of the medical profession. From all we have been able to gather from intimate intercourse with the physicians of our asylums, we feel convinced that the general profession are entitled to the very same eulogium as that awarded by Lord Shaftesbury to our brethren in England. Certainly not on the side of loose awards of certificates of insanity is it that errors are most liable to occur, but on the contrary, on that of the withholding of them, in numerous instances in which they would have been not only justifiable, but also essential to the protection of the insane, and the safety of the community.

DISEASES OF THE SKIN, by James Nevins Hyde, Professor of Skin and Venereal Diseases, Rush Medical College, Chicago. Philadelphia: H. C. Lea's Son & Co. Toronto: Willing & Williamson.

This is a good book of 572 pages, on good paper

and in readable type. It is inscribed to Kaposi, of Vienna, which apprizes the reader of the fact that the author has travelled, and has studied his specialty under a competent instructor, who would appear to have given him very liberal permission to copy his plates. This is not the least of the excellencies of Dr. Hyde's volume. The book is written in good English, a fact which almost leads us to surmise that its author has spent long enough time outside the big pork market, to enable him to avoid almost all those peculiar idioms and words which, unfortunately, blemish too many of the literary productions of our western cousins, who seem every year, in point of both orthography and syntax, to be becoming more and more a law unto themselves.

When we inform our readers that Dr. H. has bestowed no less than sixty pages on Eczema, alone, they are not to conclude that he has given to it too much space. This is one of those most prevalent cutaneous affections which are sometimes equally puzzling and profitable to the practitioner, and if authors in general were to devote more attention to common every-day diseases, they would better meet the wants of the purchasers of their works, both in a professional and a pecuniary sense. As regards Eczema, it is pretty certain that the class of patients who call in medical attendants, are just those who are most able to pay, and whose purses indeed demand depletion; and this is as much as to say, buy Dr. Hyde's book. Some people may be inclined to find fault with the absence of coloring in the plates, which are 66 in number. We regard this want as no defect, but rather the contrary, for colored plates, in any department of medicine or surgery, are often more misleading than instructive. The student is too apt to be exactive on nature, and to demand uniformity of morbid aspects in all cases; whereas nothing is more rare than to meet with any two so closely resembling each other, or any one so closely resembling a captivating colored plate, as to render them readily, in all points, identifiable with any of the described or depicted forms he has studied in illustrated books. We have read a pretty large portion of this book, and we cannot withhold our expression of general satisfaction with the contents; but, dear me! Shakespeare said something "of all the ills that flesh is heir to"; had he read Dr. Hyde's book, he would not have written *flesh*, but

skin. Satan must have had a forecast of dermatology when he suggested the temptation of Job by asking leave to test him in this tissue; and he perhaps foresaw that his children would some day make a pile of money out of it; and who better than he understood the power of cash?

MANUAL OF GYNÆCOLOGY.—By D. Berry Hart, M.D., F.R.C.P.E., and A. H. Barbour, M.A., B., Sc., M.B. New York: Wm. Wood & Co.

The edition of this work before us forms part of Wood's Library of Standard Medical Books. It is a reprint of the Edinburgh edition and is in two volumes, being the monthly issue for the months of January and February of the current year. Beginning with a full account of the anatomy of the external organs and pelvic contents in the female, the relations of the several organs are carefully and fully dwelt upon. The several methods of examination of the uterus, manual and instrumental, are pointed out, with the various surgical appliances required in many cases of disease of that organ and its surroundings. The more common pelvic affections are fully entered upon, while those more rarely met with come in for a full share of notice. Affections of the Fallopian tubes, the ovaries, and the uterus, with the several displacements of the organ, and its many morbid conditions and growths, are treated of in a comprehensive manner. Vaginal and vulvar diseases are also described, although, of course, not at any very great length. The disturbances of the function of menses, and the various abnormalities of reproduction, are also noticed; and the second volume closes with a concise account of affections of the female bladder and rectum. An appendix is added to this volume, giving a good deal of information in regard to syphilis, chlorosis, and other important matters connected with case-taking. Altogether the book is a useful addition to any practitioner's library.

A MANUAL OF CHEMICAL ANALYSIS as applied to the examination of medical chemicals, for the use of pharmacists, physicians, students, etc. Third edition, thoroughly revised and greatly enlarged. By Frederick Hoffman, A.M., Ph.D., and Frederick B. Power, Ph.D. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

This work has been very much enlarged and improved in passing through the various editions,

and now contains about 600 pages. The senior author, Mr. Hoffman, is Public Analyst of the State of New York, and Mr. Power is Prof. of Analytical Chemistry in the Phil. Coll. of Pharmacy. The press work and binding are handsomely executed, and we believe the book will not disappoint the purchaser.

MANUAL OF HISTOLOGY, by Thomas E. Satterthwaite, M.D., Prof. Histolog. and Patholog. Anatomy in N. Y. Post Graduate Med. College, in connection with fifteen of the most capable physicians in the Atlantic States. Second edition, enlarged and revised, containing 202 illustrations and an appendix. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

It is only a short time since we received the first edition of this work. The issue of another edition within so short a period, shows the favor with which the work has been received by the profession. The present edition is a great improvement on the first, and is worthy of increased favor.

HANDBOOK OF THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT, NOSE AND NASOPHARYNX, by Carl Seiler, M.D. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

We have received the second edition of this excellent manual, which has been considerably enlarged. We can especially commend the chapters on nasal catarrh and tumors, as containing much useful information. The engravings are unexceptionably well executed; the style is clear and general get-up excellent.

HOW TO USE THE MICROSCOPE.—Intended for beginners. By John Phin, editor of the *Am. Journal of Microscopy*. Fifth edition, revised and greatly enlarged. New York: Industrial Publication Co.

The work before us will be found an excellent manual for students beginning the use of the microscope. A full description of the instrument and explicit directions are given with regard to its use. We would recommend the book to any one requiring a guide to the use of the microscope.

TRANSACTIONS OF THE THIRTY-SIXTH ANNUAL MEETING of the Ohio Medical Society, held at Columbus, O., June, 1881, and of the Thirty-seventh Annual Meeting in June, 1882.

STUDENT'S GUIDE TO DISEASES OF THE EYE, by Edward Nettleship, F.R.C.S. Second, revised and enlarged, edition. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

We have had occasion before to commend Mr. Nettleship's manual. It comes to us again considerably enlarged and with the addition of a chapter on Color Perception, by Dr. Thompson, of Philadelphia, and fifty new engravings.

ILLUSTRATED MEDICINE AND SURGERY, QUARTERLY, Vol. II., Nos. 1 & 2, edited by Drs. G. H. Fox and Fred. Sturgis, New York: E. B. Treat & Co., 757 Broadway. Price \$8 per annum.

This is a most excellent and useful publication, and cannot fail to become popular with the profession. It is deserving of the highest commendation and worthy of general support.

NOTE BOOK FOR CASES OF OVARIAN AND OTHER ABDOMINAL TUMORS.—By Wm. H. Hingston, M.D., D.C.L., L.R.C.S., Edin., Surgeon to Hotel-Dieu, Prof. of Clinical Surgery, Montreal School of Medicine; Consulting Surgeon to Woman's Hospital, &c., &c. Montreal: Dawson Brothers.

A HANDBOOK OF HOMEOPATHIC PRACTICE; By George M. Ockford, M.D., Member of the American Institute of Homeopathy. Chicago: Duncan Brothers. 1882.

HANDBOOK OF MEDICAL ELECTRICITY.—By A. M. Rosebrugh, M.D., Surgeon to the Toronto Eye and Ear Dispensary, &c., &c. Dudley & Burns, printers, Toronto.

Births, Marriages and Deaths.

On the 23rd ult., Dr. J. B. Gullen to Dr. Augusta H. Stowe, daughter of Dr. Emily H. Stowe, all of Toronto.

On the 16th April, James Bovell, aged 3 years; on 21st April, Minnie, aged 5 years and 5 months; and on 24th April, Nellie, aged 7 years; children of Dr. Wadsworth, Fox Lake, Wis., U. S.

At Newcastle, on the 30th of April, James A. Hunter, M.D., L.R.C.P. & S., Ed., aged 27 years.

On the 1st ult., Dr. Robert Eustace, of Canso, N. S., aged 47 years.

On the 6th ult., Dr. A. Chisholm, of Alexandria, Ont., aged 32 years.

THE CANADA LANCET,

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CRITICISM AND NEWS.

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Original Communications.

PASTEUR ON THE ATTENUATION OF VIRUSES.*

TRANSLATED BY C. W. COVERNTON, M.D., M.R.C.S.,
TORONTO.

The managing committee, aware that I had the intention of passing the holidays in the Jura, a short railway journey from your beautiful city of Geneva, have had the kindness to invite me to read a paper on the "Attenuation of Virus." I have accepted with readiness, happy to find myself, even for a short time, the guest of a people friendly to France in adversity as in prosperity. Besides I entertained the hope of meeting here with the opponents of my labors in recent years. If congresses are a ground fitted for drawing together and conciliation, they are in the same degree a fitting arena for courteous discussion. We are all animated with a high motive—the motive of progress and truth. You are aware, gentlemen, that our knowledge of viruses has been recently enriched by valuable discoveries which had their origin in the researches that I published in 1880 on the microbe of the disease termed chicken cholera. A virus, when it is represented or constituted by a microbe, may without any marked change in its general morphology be attenuated in its virulence, preserve this in culture, produce germs, and under its new state communicate a passing ailment capable of protecting from the mortal disease peculiar to the action of this virus in its natural state. This most valuable modification may be produced by a simple exposure of the virus to the oxygen of the air. This action of the oxygen is further variable with the temperature at which it operates and with the medium containing the virus and in which it has taken its origin. These facts, first established in

investigating the microbe of chicken cholera, have been extended since to the microbe of charbon or anthrax in a series of studies in which I had for my collaborators M. M. Chamberland and Roux. About the temperature of 16° , as also about that of 43° C. (temperatures which are near to those in which the culture of the bacillus is impossible), this bacillus no longer forms spores in the different broths of culture, fowl broth for example. Its exposure to the contact of the air at these temperatures, particularly at that of 42 and 43 , attenuates it progressively from day to day until it has eradicated from it all virulence and soon causes it to perish by rendering it unfit for any culture. The certain proof that it is to the oxygen of the air that we must attribute the attenuation of the microbe of chicken or fowl cholera has been established by a very simple method. It suffices to compare the effects of cultures where oxygen is excluded with those of similar cultures exposed to the influence of the air. These perish in a few months, having passed through different phases of attenuation; whilst the cultures protected from exposure to air in sealed tubes show themselves to be for this microbe very virulent after the lapse of several years. The peculiarities of the bacillus anthracis, or microbe of charbon, differ in many respects from those of the microbe of fowl cholera. The differences are that it lends itself much less easily than its congener to observations of the nature of which I have just spoken concerning the action of the oxygen. That is due to this circumstance, that the microbe of charbon under its form of filaments dies quickly in a tube sealed from the action of the air. The difficulty can be interpreted, and placed still in evidence the influence of the air on the microbe of charbon, by the following artifice. Suppose, to fix the idea, that a broth is seeded, and that it is distributed in closed tubes subsequently placed at a temperature of 42° — 43° , and that they are dead in the tubes in six days, which may be easily proved in seeding every day one of the tubes. There is nothing to prevent your making with the culture of the fifth day, on the eve of the death of the closed tubes, a new culture equally protected from the air, which shall be in its turn at 42 — 43° . If the new culture dies also in six days, a third may be prepared which shall be distributed also in closed tubes, the seeding of which shall be taken from the culture of the

* Delivered before the Congress at Geneva, Sep. 6th, 1882.

fifth day, and so on in succession. At the same time that we are proceeding with this series of successive cultures *in vacuo*, we prepare parallel cultures in flasks in contact with the air. We will now compare the virulence of the closed tubes with the virulence of the cultures of the same days which have been exposed to the contact of the air. We have established that the virulence of the cultures exposed to the air has become more and more attenuated and cannot produce the death of the cobayes,* whilst those of the cultures in closed tubes kill. The action of the oxygen of the air in the attenuation of the anthrax or charbon microbe is then equally incontestable with that on the microbe of fowl cholera. The influence of oxygen for the attenuation of the microbe of charbon may be viewed also by a remarkable peculiarity. It is known that M. Toussaint has announced the attenuation of this microbe by the effect of heat alone, and that we can procure by this means vaccinal bacterides; but we have recognized that these bacterides do not preserve in their cultures their produced attenuation. Immediately the first culture of the blood is heated it again becomes virulent and deadly. The bacterides attenuated by oxygen, on the contrary, preserve their attenuation in the cultures. This difference has a greater importance and it is to it in part that we must attribute the difficulty of obtaining charbon vaccinations practically utilizable by the method of M. Toussaint. We do not at all hold the opinion recently advanced to the contrary by M. Chauveau in a note read at the Academy of Sciences. There is at any rate nothing in it the least reliable, sure or regular, whatever precaution may be taken, in the effect of heat on carbonized blood, even when exercised when very thin and at a fixed temperature.

The principal object of the communication that I have the honor to make to you is to furnish new examples of attenuation by the oxygen of the air, and to demonstrate that we have to do with a general method of attenuation of certain viruses. I commence with a microbe which is shown for the first time under circumstances as interesting as curious. I have again had as collaborators in the studies on which I am about addressing you M.M. Chamberland and Roux, and in addition particularly M. Thullier. It is in their name equally with my own

that I speak. On the 10th of December, 1880, I was requested by Dr. Lannelongue, surgeon of the Hospital St. Eugène, to visit a poor child of five years seized with hydrophobia. She had been bitten on the face a month previously by a mad dog. Four hours after her death, which happened on the 11th of December, we inoculated two rabbits with mucus from the palate diluted with water. The rabbits died in less than 36 hours. In their blood we recognized a special microbe, cultivable in a state of purity, and from which successive cultures occasioned death to rabbits, their blood always having present the same microbe. The cadaveric lesions consisted in a partial dilatation of the venous system, in a swelling and wine lees redness of the ganglions of the groin, of the arm-pit and of the trachea. This is always hæmorrhagic. A little saliva moistens the lips and runs from their commissure. The lungs, generally œdematous, are sometimes hepatized. At the point of inoculation made under the skin of the bowels in the cellular tissue, this is slightly œdematous and emphysematous. In a trial, when we attempted to discover the moment of the appearance of the virulent organism in the blood, we perceived that nine hours after inoculation the seeded blood cultivated the microbe of the disease, without this being as yet visible by the microscope; but that twelve hours after inoculation it was perceived by the aid of the instrument. The fever appeared at the same time that the microbe was shown; death took place thirty-five hours after inoculation. The temperature only sank to 40° C. two hours before death. The animal weighed 1.920 kilo. at the time of inoculation, 1.730 kilo. at the moment of death, a diminution of 190 grammes in thirty-five hours. The saliva of rabbits dead transmits invariably the disease to other rabbits. Adult guinea-pigs support perfectly inoculation with this microbe, but it kills in two or three days cobayes of some days of age. In pursuing inoculations from cobayes to young cobayes, the virulence is exalted, and we easily arrive at killing cobayes at one, two, three and four months. With the first cobayes the cellular tissue around the point of inoculation shows œdema, bathed with bloody serosity, often thick and gelatiniform; the subjacent muscles are lardaceous, thickened, and purulent. It is remarkable that in proportion to the raising of the number of the

* Guinea pigs.

order of the animals inoculated, in successive inoculations the lesions change in character; the gelatinous degeneration of the cellular tissues, the purulence of the subjacent muscles disappear, to be replaced by a pronounced redness of these muscles. In these special conditions of exaltation of virulence, one would expect to see a cobaye die from acute septicæmia. The microscopic organism is found in abundance in the muscles, rarely, on the contrary, in the blood, and often in so small a quantity that it is not always visible to the microscope. There would seem to be a change of habitat of the microbe, in consequence of the augmentation of virulence. Here we have presented a circumstance worthy of interest; while the microbe has been augmented in virulence by passage through cobayes, it shows itself, on the contrary, less efficacious if it is reproduced in rabbits. This is not the only microbe which is thus characterized; we have made known the existence of this microbe to the Academy of Medicine in Paris, the 18th of January, 1881. We have seen then all the benefits that microby may render to etiological medicine. At the same time that we were making a study of this pathogenic microbe, Dr. Maurice Reynaud, of regrettable memory, equally devoted himself with Dr. Lannelongue to experimenting on rabbits with the saliva of the child seized with hydrophobia, as before mentioned, under observation at the Hospital of St. Eugène. Like us, he occasioned the death of the animals inoculated, but purely from a clinical point of observation; leaving aside the possible action of microbes that may have been introduced into the bodies of the rabbits at the same time with the rabic virus, he concluded that it was hydrophobia that he communicated to the rabbits. Until there is proof to the contrary, he said, we believe that it was from true hydrophobia that our rabbits died. M. Galtier has announced that he has transmitted hydrophobia from the dog to the rabbit, and has fixed upon eighteen days as the mean period of the incubation. The rabbits of Dr. Regnaud died much quicker, the mean of the duration between the instant of inoculation and death not being more than forty-five hours. This conclusion was not made as questioning the conclusion of Dr. Reynaud, as his experiences were derived from the transmission of hydrophobia, not from the dog, but from the human being, to the

rabbit; he attributed, therefore, the difference in the period of incubation to that circumstance. Previously, viz., on the 27th of October, 1879, M. Reynaud announced that he had, by inoculations of saliva, transmitted the hydrophobic disease in man to rabbits. This first conclusion was not more exact than that which I have now recorded. It is not that it may be very easy to communicate hydrophobia in man either to the dog or to the rabbit—we have often done it—but already at this time M. Reynaud had only had to deal, to his knowledge, with rabbits dead from this new microbe. Nevertheless, if the rapid death of rabbits in these varied experiments was due to an entirely new microbe, it may be asked whether this microbe had not some hidden relation with the true microbe of hydrophobia. Was it not a strange circumstance, this salivation in our rabbits, and the easy provocation of the disease and of death by their saliva inoculated into healthy rabbits? Besides, was it not very interesting to investigate whether we should find the same virulence in the saliva of the child who died from hydrophobia at St. Eugène, and in the saliva of other people labouring under the disease?

The occasion soon presented itself for clearing up doubt. On the 23rd of February, 1881, M. Percheron, a veterinary surgeon, pointed out to me a child, six years of age, presenting all the symptoms of hydrophobia; she also had been bitten, a month previously, in the face by a mad dog. Her death took place the same day, 23rd February, at four in the afternoon. The next day, on the 24th, a little of the salivary mucus was collected, with which two rabbits were inoculated, one in the cellular tissue of the abdomen by a Pravaz syringe, the other in the face by a lancet. The last presented no symptoms; the first died in three days. Its blood presented in abundance our new microbe with its habitual virulence. At the same time a journeyman blacksmith, aged 49 years, bitten by a mad dog four months and a half previously, died on the 22nd of February at the Hospital La Pitié, under the care of Dr. Brouardel. An hour and a half after his death several rabbits were inoculated with the saliva from his mouth and mucus from the palate. Other rabbits had already been inoculated by the saliva, but taken before death—some hours, and immediately before—by Drs. Brouardel and Beaumetz. Thanks to the kindness of

these enlightened physicians, I was enabled to assure myself that not only the rabbits that I had inoculated, but some of those from whom the virus had been taken, had died from the microbe we are now discussing.

An attentive and prolonged study of the effects of the inoculation of the rabic human saliva in rabbits, enables us to establish three kinds of death : 1st, death from the new microbe ; 2nd, death from abundant purulent disorders, with baring or separation of the skin, accidents of the septic order ; 3rd, death from madness peculiar to the rabbit. This last has always a very long incubation, and is characterized invariably by paralysis of the limbs, which lasts 24, 48 or 72 hours before death. The aptitude to bite never exists, so to speak, in the rabbit madness—at least I have only seen one instance in hundreds of cases. Death from purulent disorders may take place in a few days or in a few weeks ; in this case it is rare that paralysis exists. Death by the new microbe is always rapid unless there exist purulent complications, in which case death may be retarded for several days. To sum up, the saliva of individuals affected with canine madness contains, besides the rabic virus, not characterized as yet by a cultivable microbe, a virus formed by a special microbe that can be easily cultivated, and other microbes capable of producing death by exaggerated production of purulent matter, excessive local disorders, and sometimes of introduction into the blood of common microbes. In the saliva of children who died from hydrophobia the new microbe appears abundantly, and frequently sufficiently so to occasion the death of rabbits with greater rapidity than would be done by rabic virus, or by the microbes that are the occasion of purulent and putrid disorders. This new microbe discovered in the saliva of persons seized with hydrophobia, does it exist only in this sort of saliva ? This question naturally presents itself to our mind. It is even the first that must be solved if we seek to assure ourselves of a hidden relation between this microbe and canine madness. As to the case of the new microbe existing in other saliva, it is evident that it would be independent of the rabic virus. From the studies that we have devoted ourselves to, it has resulted that the saliva of adult persons, dying from diverse maladies, did not contain the new microbe, or rather that it has been masked in our experiences by the abundance

of microbes requisite for forming pus ; that, on the contrary, the saliva of children dying from diverse diseases has produced death to rabbits by the microbe that we are discussing, and that it has again been found in the saliva of persons in robust health. The new microbe then has no relation with the rabic virus. The microbe of saliva that I have been discussing is the third virulent microbe on which we have tried attenuation by the action of the oxygen of the air ; I desire to present it to you ; it is as yet unpublished, and very interesting on account of the diverse details of its history. You already know what happens to the cultures of the microbe of fowl cholera when we pass from one culture to that which follows, without placing between these cultures a long interval. The virulence of the second culture reproduces the virulence of the first without appreciable change, and it is the same with successive cultures. It is only when we allow a longer or a shorter time to elapse between two consecutive cultures, that we observe a diminution of virulence. In other words, it would appear that the oxygen of the air has only influence for attenuating a culture provided this is completed ; so long as the oxygen is employed for the life, for the acts of nutrition of the microbe, its attenuating influence is not exercised in any very sensible manner ; it is not entirely nil, but it escapes ordinary observation. Our microbe of the saliva behaves like the microbe of the cholera of fowls. If you make your cultures succeed each other from twelve to twelve hours you will find in all the cultures the same virulence ; that is to say, if we take the rabbit for a criterion of virulence, these animals die as quickly and promptly by the last cultures as by the first. M. Thullier had the patience to make, under these conditions, two series of eighty cultures, and the eightieth killed the rabbits as quickly as the first. To furnish the proof of differences it would have required the sacrifice of a very considerable number of rabbits, or to have operated on animals more refractory to the virus. If we now compare successive cultures, allowing them to remain a longer or a shorter time in contact with the air before passing from one to the other by seeding, the circumstances in some particulars are very different than for those of cholera of fowls ; the cultures die quickly. One is surprised to notice that in endeavouring to seed a culture in a fresh broth, most frequently after two or three days of waiting for the

mother culture, there is complete sterility, and the death of a culture occurs all the more rapidly in proportion to the high or low number. A culture seeded directly by the virulent blood lives six to twelve or fifteen days. If with this culture we seed a second culture, with that a third, and so on, we observe a prompt diminution of the duration of life and of the virulence of the cultures; the eighth would live three or four days, whilst the twelfth would live thirty hours, the twenty-fifth twenty-six hours, the forty-eighth and the following from about twenty-two to twenty hours. These cultures inoculated about the end of their life in rabbits do not always kill them, and it is easy then to determine that among rabbits inoculated under those conditions many will afterwards resist virulent inoculations. The disease does not then relapse, at least for a long time; nevertheless the rapidity with which the cultures die renders it very difficult to seize upon the precise moment when the seeding of the culture will give a reliable vaccination. It would be necessary to be able greatly to prolong the duration of the life of the cultures. We arrive at this easily on making a medium of the culture of broth with the blood of the rabbit. The broth most fitting for the culture of the microbe is veal broth. The broth from fowl, rabbit, beef and mutton is unsuitable. Two parts of veal broth and one part of pure blood of the rabbit give, by seeding with virulent blood or with a culture in broth of the same grade, cultures which have up to forty or fifty days of duration. In the last ten days of broth cultures seeded with this blood mixture, a series of graduated virulent cultures are formed, all vaccinal in different degrees. It is altogether the action of the oxygen of the air which modifies the culture and progressively attenuates the virulence. The proof is easy to give by the means I have already illustrated, that is to say, by a comparison of cultures made and preserved and kept in contact with air with those in closed tubes or *in vacuo*. Whilst a culture made and exposed to the air perishes in a few days in veal broth, the same culture made and kept in a closed tube or *in vacuo*, is still virulent after three or four months, perhaps longer. Besides, when death occurs in the closed tubes the virulence is preserved up to the moment of death.

We are thus in possession of three microbes that may be attenuated by the same method, which

contributes besides to the ready preparation of their vaccinal preventives—the microbe of fowl cholera, the microbe of anthrax or charbon, the microbe of saliva, particularly of the saliva of hydrophobics. If I add a fourth to this communication, I think that this new example will suffice to convince you, as I am myself convinced, that a general, rational method, in no ways an empirical one, of attenuating and of preparing many vaccinal antidotes has been found.

(To be continued.)

ON CANCER OF THE LARYNX.*

BY G. S. RYERSON, M.D., L.R.C.P.S., ED.,

Surgeon for Eye, Ear and Throat Diseases to the General Hospital and Hospital for Sick Children, Toronto.

I propose, in the following paper, to draw attention to some points of much practical interest in the diagnosis and treatment of malignant disease of the larynx. It has been my lot since commencing practice in Toronto to have had three such cases under observation, and I think that a brief relation of the facts of each case would make a pertinent preface to my remarks.

CASE I.—On Dec. 6, 1880, Mr. A., married, aged 57, an hotelkeeper, came to consult me with regard to a painful affection of the throat. He gave the following history: Father died, aged 49, of consumption; mother at 79, of old age. Three healthy living children; two died in infancy. No relatives on either side had any tumor or growth. He had always been in good health himself; was a moderate drinker and smoker. Had had no scald or injury of the part.

Nine months before coming to me he had a prickling sensation at the root of the tongue—no loss of voice. For last three months the voice has been getting husky; no difficulty in breathing. It came on, he said, after an attack of rheumatism. He is a spare man, and has lost flesh. There is no marked impairment of the general health—feels pretty well, in fact. Denies any specific taint. He has much pain in swallowing. The voice is indistinct, and it is painful to speak. No dyspepsia. Complains much of pain shooting up to the ears. Externally, two enlarged and indurated glands could be felt at the side of the thyro-hyoid mem-

*Read at the annual meeting of the Ontario Medical Association in Toronto, June, 1883.

brane. The base of the tongue seems thickened and hard. The tongue can only be protruded a short distance, and inclines to the left; it has deep longitudinal furrows. There was not much of the interior of the larynx visible, owing to the drooping over of the epiglottis. Posterior portion of right vocal cord and arytenoid much thickened and reddened. Epiglottis greatly enlarged and hangs over to right, being red and smooth on lingual surface. On the left, a large, unhealthy-looking ulcer, with elevated, everted and sinuous margins. I do not know the ultimate history of this case; I wrote, but received no answer.

CASE II.—This case I saw but once, on June 6th, 1881. It was that of a woman, æt. 67. The throat had been weak and inflamed for years. Had had considerable pain for last two years. Her speech had been affected for 18 months. There was much difficulty in swallowing for about the same length of time. At the time I saw her she had complete loss of voice; was unable to protrude the tongue, and only able to open the mouth about an inch. Swallows with the greatest difficulty, only a teaspoonful at a time. She is literally a walking skeleton, having been formerly very stout. The glands were enlarged and indurated about the hyoid. Much thickening of the lower portion of the pharynx, larynx and base of the tongue. Bluish warty growths were to be seen on the base of the tongue. Larynx disorganised. No family tendency to tumors or growths. Her son informed me, two months later, of her death.

CASE III.—A year ago last January, J. P., a man of 51 years, felt as though something had lodged in his throat. He had slight cough, but no pain. There was gradual increase of difficulty of breathing until I was called to see him, on the 7th of May of last year. He had pain, extending up to the ears, and great dyspnoea. He was unable to lie down, was restless, and had a frequent, weak pulse. I had him removed to the hospital, where I performed tracheotomy, with immediate relief. Patient went off to sleep and slept for nearly twenty hours, awakening much refreshed. The operation I did was Boze's. He began to have difficulty of swallowing about the new year; the voice began to fail about the same time. The glands in the neck were enlarged for about six months. He has considerable pain in the right shoulder. No family history of tumor. He is a moderate smoker, but,

occasionally, an immoderate drinker. No syphilis. General health fair, but is weak from want of food.

Laryngoscopic exam.—Epiglottis drawn down and to right; difficult to see into larynx; a rounded reddish-grey mass lies on right ventricular band—it is firm to the feel; bluish-brown patches are to be seen at the base of the tongue as in Case 2. The growth has ulcerated; there is some fetor of the breath, and almost complete loss of voice. The pain in swallowing has increased.

The diagnosis of cancer of the larynx must be made with the laryngoscope. The subjective symptoms, such as pain, dysphagia, dyspnoea, hoarseness, and fetor of breath, may be caused by other diseases. In two of my cases I have observed bluish-brown warty growths or nodules at the base of the tongue. They have appeared late in the disease and in groups on the tongue, and in Case 2 on the fauces as well. I have not seen any account of them in any work at my command. The differential diagnosis between cancer of the larynx and late syphilitic ulceration, particularly the gummatous form, is of considerable importance. I would tabulate them roughly thus:

CANCER.	SYPHILIS.
Age—After 45.	Before 45.
<i>Edge of Ulcer</i> — Defined, infiltrated, hard, everted, and often scalloped.	Less defined, may be excavated and sloughy, not infiltrated or everted; reddened areola.
<i>Pain</i> — Pretty constant, darting up to ears.	Comparatively slight.
<i>Glands</i> — Submaxillary indurated and enlarged.	Same; post-cervical also affected.
<i>Prognosis</i> — Steady, often rapid, resists treatment.	Slow, often stationary, amenable to treatment.
<i>Previous history</i> — Perhaps of irritation.	Chancre, eruptions, &c.
<i>General health</i> — Fair.	Often broken.

Some of these points are liable to considerable variation, as, for instance, in the matter of age. Cancer may occur before 45 and syphilitic ulceration long after that age. The progress, too, of syphilitic ulceration is often very rapid and resists treatment. In many cases iodide of potassium must be given before a definite conclusion can be arrived at. The laryngoscopic appearances vary with the stage. In the early stage they closely resemble those of gumma, and appear as a reddish-grey mass, situated most frequently on one or other

ventricular band, most frequently the right; the epiglottis is also a favorite locality. After ulceration begins the appearances presented are more characteristic. An ulcer with everted, indurated edges, greyish surface, without much depth, and attended by glandular enlargement, must always be regarded with great suspicion and anxiety.

Nearly all varieties of malignant growths attack the larynx, but epithelioma is by far the most common. The prognosis is naturally very grave. It is a curious fact that while cancer of the larynx is sometimes secondary, it rarely leads to secondary deposit in organs or parts other than in its immediate neighborhood. This is readily explainable by the sparsity of glandular or lymphatic connections with other parts. The very late failure of the general health may be explained in the same way. The duration of life with epithelioma is about eighteen months; with encephaloid, three years. Patients often perish suddenly from œdema of the glottis; but where life is prolonged, death occurs by apnoea; or where tracheotomy has been done, by exhaustion. The causation of cancer of the larynx is as obscure as that of cancer in other situations.

Treatment.—Relief from pain and discomfort, as well as a modification of the course of the disease, may be obtained by spraying the part twice a day with Dobell's solution, or by insufflating a powder containing morphia, gr. $\frac{1}{4}$; iodoform, gr. $\frac{1}{2}$, and a little starch. The powder is best suited to the stage of ulceration. I need hardly mention that everything should be done to keep up the general health. But I wish to lay particular stress upon the value of early tracheotomy. Fauvel, of Paris, tells us that it adds months and even years to the patient's life. In seven cases of encephaloid left to their own course, life lasted for three years; while in eight which were tracheotomized, the average duration of life was three years and nine months. In six cases of epithelioma left to their own course, the mean duration of life was one year and eleven months; while in seven other cases after tracheotomy, life lasted an average of four years. In Case 3 of my own short series, life has already been prolonged for a year, for there can be little doubt that he would have died long since had he not been operated upon. These facts are very striking and merit our earnest attention.

Thyrotomy can hardly be recommended, as the results have been very bad.

Extirpation of the larynx is an operation which has been practised, up to the year 1882, twenty-three times. Of the cases, sixteen were carcinoma, five sarcoma, one perichondritis with necrosis of the cartilages, and one lymphatic granuloma. Of the sixteen carcinoma cases, seven died as a result of the operation, and seven from a recurrence of the disease at from four to ten months after the operation. In one case the operation was entirely successful, and in that case the disease was confined to the box of the larynx, and the operation was done early. Of the five cases of sarcoma one died seven months later of asthenia, while the remaining case of granuloma was successful. Thus we find one case of malignant and five cases of non-malignant disease really cured by this operation. I think we may fairly consider these results brilliant. In all probability the non-malignant cases would have ended in death by apnoea had not this operation been performed.

I am strongly inclined to the opinion that when the disease is confined to the box of the larynx, and before any glandular structures are involved, the operation will prove a success even in malignant disease, and I think that an operation which can save six cases out of twenty-three from almost certain death may justly be regarded as "one of the greatest triumphs of modern surgery."

PRIMARY LATERAL SCLEROSIS.*

BY J. CAMPBELL, M.D., C.M., L.R.C.P., EDIN., ETC.,
SEAFORTH, ONT.

As primary sclerosis of the lateral columns of the spinal cord is a comparatively new and somewhat rare disease, and believing that I have such a case in my practice, I resolved to report the same, thinking that it would not be without interest to the members of this Association. As you are aware, we are beholden to the observations and investigations of Türck, Charcot, Erb and others, for our limited knowledge of this rare and interesting disease, Türck having given the result of his researches to the world in the year 1856, Charcot in 1865, Erb and others at more

* (The patient was exhibited and the paper read before the Ontario Medical Association, in Toronto, June 6, 1883.)

recent dates ; but there is still room for scientific research. We will simply report the following case, which we believe to be one of primary lateral sclerosis, and will then leave the subject entirely in your hands.

History.—H. B., æt. 36, is by occupation a farmer. He has been married six years ; the father of two children, one aged $4\frac{1}{2}$, the other $1\frac{1}{2}$ years. He was born in Prussia, but came to Canada 27 years ago ; has lived in the county of Huron, Ont., ever since. Has had no previous illness ; met with an accident 10 years ago by falling from a scaffold a distance of 12 feet, the small of the back striking on the edge of a board ; his back was sore for over a week afterwards. In the spring of 1882, while pulling a stick off a pile of wood, he felt a sharp pain in the small of his back. Has always been temperate in liquors ; has had a good appetite all his days. Family history good ; his father is healthy at the age of 65 years, mother 62 years of age and healthy ; one sister died in infancy, the rest are healthy. He is 5 feet 10 inches in height, his average weight being 170 lbs. ; his present weight is 160 lbs. He has moderately broad shoulders, with a somewhat flat breast. His temperament is a mixture of the sanguine and nervous, with a trace of the bilious ; his complexion is fair. He has a somewhat awkward shuffling gait. Has always been a hard worker, and a good deal exposed to wet and cold. Says he has been moderate in venery, and since his illness began has been very cautious in this respect. Says that he cannot stand the cold.

Present Illness.—In July, 1882, his wife noticed him twitching in his sleep, and repeatedly awoke him, as she felt alarmed about it. He applied for treatment on the 23rd of Oct., as he felt weak, and was somewhat anxious, as well as annoyed, on account of the twitching continuing. His appetite had now begun to fail. Upon examination found tenderness moderately well marked over the third dorsal and last lumbar vertebræ. The application of hot and cold sponges gave negative results ; electrical contractility appeared to be normal. He had slight symptoms of paresis in the lower limbs, and was easily tired by either standing or walking for any length of time. He also complained of weakness in the upper extremities when he attempted to do any work. When he walked he shuffled his feet along instead of lifting

them lightly from the ground. When his eyes were closed he did not stagger, and presented no symptoms of ataxia. The nutrition of the muscles did not appear to suffer to any appreciable extent ; sensibility was normal. Reflex excitability of the skin was only slightly increased ; the tendon reflexes were greatly exaggerated. The functions of the brain, bladder and rectum were normal ; sexual power was neither increased nor diminished. The most prominent and continuous symptoms were the spasmodic twitchings, spasms, and tremors of the muscles of the legs, and sometimes of those of the abdomen and thorax. These were worse after exertion and excitement, but sometimes occurred after sudden passive movements as well—or even after no movements at all, as during sleep, when the patient would be awakened by them. From the 23rd of Oct. until the middle of Nov., the patient was on Ext. ergot, fld. m. XX. three times a day, with tonics occasionally, as Ferr. et quin. cit. ; also lactopeptine and other remedies to aid the digestive powers. At the same time we recommended a good, substantial, unstimulating diet, with passive exercise in the open air, sponging of the body, followed by friction, and hygienic measures generally. Hot baths to the spine were also recommended, but the suggestion was never acted upon. By the middle of Nov. he was so much improved that he helped his brother to box in a drain. Whether from the cold and wet incident to this occupation or not, he got worse after this, and, as he felt discouraged, the advice of my friend, Dr. Gunn, of Brucefield, was obtained. Dr. Gunn agreed with me as to the nature of the disease, and after consultation, we resolved to put him upon a mixture containing Potass. brom., potass. iodid. and hydrarg. bichlor., with a bitter tincture. This was varied sometimes by substituting Tr. digitalis for calumba or gentian. The doses of the principal ingredients were also increased or diminished from time to time, as the symptoms seem to indicate. After this he greatly improved for a time, but afterwards relapsed, when he would be one week better and another worse ; but on the whole his appetite was rather poor, which told on his general strength. The twitching of the muscles was what alarmed him most ; when this was allayed, as it was under the influence of the medicine, he felt better ; when it returned he felt worse.

About the 20th of April he sought the advice of Dr. Fulton, of Toronto, to whom I addressed a note, stating what my diagnosis was. At the time of his departure for the city he felt somewhat better than he had done at any period during the winter, and consequently felt inclined to delay his visit; but, as I was by no means buoyant as to the future, I urged him to go. Dr. Fulton, after a thorough examination of the patient, verified my diagnosis, as Dr. Gunn had previously done. He recommended that he should be put upon Ext. ergot. fld. 3 i., three times a day, which was done. The result of this treatment, so far as I could discern, was favorable for the space of one month, after which time the twitching began to get worse, and has been getting gradually stronger for the last two weeks. As a rule he sleeps pretty well, but on the evening of the 4th inst. he was awakened by the twitching, which begins below the knees and works upward, to use his own words, until it gets into the body, where he says he feels it shaking the liquid in his stomach. On the evening referred to he says he felt trembling or shaking in the soles of his feet, "just like lightning"—undoubtedly a rhythmical tremor—but it only lasted about two minutes. He does not feel like attempting any work; his appetite, which had improved during the month that he was on the mend, is again impaired. The patient is under close observation, and the progress of the case, either for better or for worse, will be watched by us with that interest which the nature and importance of the disease deserve.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The third annual meeting of this Association was held in Toronto on the 6th and 7th inst. The attendance of members was fairly good. Dr. J. E. White, Secretary, read the minutes of the last meeting.

A communication was received from Dr. MacDonald, the President, stating that owing to indisposition he would be unable to attend that day. Dr. Richardson, of Toronto, was therefore voted into the chair.

The remainder of the morning's session was

spent in receiving the reports of the Committees on Arrangements, Credentials and Papers and Business.

In the afternoon the chair was occupied by Dr. D. Clark, Vice-President.

Dr. Burt, of Paris, exhibited a patient treated for traumatic tetanus by neurotomy.

Dr. Campbell, of Seaforth, exhibited a case of primary lateral sclerosis.

Dr. McKay, of Woodstock, read a paper on the "Use of Jaborandi." He strongly approved of its use in cases of tonsillitis, asthma, scarlet fever, measles, pneumonia, and common colds.

A long discussion ensued, in the course of which the opinion was elicited that the remedy required to be administered with great caution, owing to its tendency to act on the heart and to produce salivation.

Dr. Covernton said that he had given the drug in tonsillitis, but combined with aconite. Benefit had resulted from the treatment.

Dr. Burrows, of Lindsay, read a paper on the "Plaster Wedge in Talipes;" Dr. Wolverton one on "Fatty Diarrhea;" Dr. Groves, of Fergus, on the removal of an ovarian tumor, and Dr. McNaughton on "Fracture of the Forearm," the latter exhibiting a new splint which restored the radial curve of the arm.

Dr. Clarke, of Kingston, read a paper on "Anomalous Cases of Nervous Disease," and gave a history of one of supposed hystero-epilepsy, which had been successfully treated with carbonate of iron.

Dr. Workman read a paper on "Aphasia."

In the evening Dr. Graham, Toronto, read a paper on "Bacilli Tuberculosis," in which he argued that the position taken by Koch on this subject had been strengthened by the investigations of other pathologists. The questions they as physicians were interested in were: (1.) Can phthisis be diagnosed by means of the presence of bacilli in the sputa? (2.) Has the number of bacilli any relation to the prognosis? (3.) Has the discovery aided us to any extent in the prevention and treatment of this formidable disease? Investigations led to an affirmative answer to the first question. The experiments made by several prominent Berlin physicians showed that bacilli were found in the sputa of patients suffering from phthisis, but they were not found in cases of bronchitis. The general opinion of the London medi-

cal faculty was that bacilli were found in cases of tuberculosis, and in that disease alone, and that they varied in number in proportion to the severity of the disease. The doctor then gave the results of the examination of the sputa of forty patients which he had examined. The conclusions arrived at by the doctor from the experiments were:—(1.) That bacilli are found in the sputa of almost, if not all, cases of phthisis; it was doubtful if there was any case of active disease in which bacilli would not be found, provided the sputa came from the lungs, and five or six examinations were made. (2.) They were found on the first examination in three-quarters of the cases. (3.) The presence of the bacilli is a positive evidence of the disease. (4.) There are doubtful cases in which the examination of the sputa for the bacilli will be of decided value in arriving at a correct diagnosis. (5.) As to prognosis, it was found that the number was in proportion to the amount and rapidity of the process of destruction. (6.) It might be said as a general rule that in the more chronic cases bacilli were fewer and, he thought, smaller. His experience convinced him of the contagiousness of the disease, of which he gave instances.

Considerable discussion followed the reading of the paper, after which Dr. Strange read a paper on "Acetonæmia," and an adjournment was made till the following day.

SECOND DAY.

The Association met at 10.30 a.m., Dr. Clark in the chair in the absence of the President, Dr. Macdonald.

The Secretary read a report by Dr. Battersby, of Port Dover, on a case of "Umbilical Hernia and the Formation of an Artificial Anus."

Dr. Mitchell gave an account of three cases of poisoning which he had recently treated. The first patient had swallowed a large dessert-spoonful of pure carbolic acid. The second patient had taken half a teacupful of Paris green. The third case was one where several persons had taken an infusion of some herb, supposed to be belladonna. The treatment was by sharp emetics and sub-cutaneous injections of morphia and of brandy, with the use of the stomach pump. In the first instance he administered olive oil and sulphate of zinc, and the patient recovered; the other two cases proved fatal.

At this stage of the proceedings Dr. Macdonald, of Hamilton, the President, entered the room, and amid applause took his seat. He explained that his absence the previous day had been caused by indisposition. He then delivered his annual address. He enumerated the advantages to be derived from the meetings of the Association, both from a social and professional point of view. Ontario being a large province, the members of the Association suffered from isolation, and the reunion brought about by the meetings of the Association tended to bring the members of the profession, who lived at a distance from one another, into closer social relations, and to aid much in removing the feeling of distrust that was supposed to exist in their ranks. The Association also was intended to fill the gap between the Dominion Association and the local organizations of the town and country. He thought that London and Kingston should be visited every year alternately with Toronto by the Association, as such a course would extend the benefits derived from their meetings over the province. He then referred to the question of the attitude to be assumed by the members of the profession towards the homœopaths in consultation. There was not that hostile feeling towards the disciples of Hahnemann in Canada that was felt in the United States, a result owing probably to the terms on which homœopaths were received by the Council of the College of Physicians and Surgeons. But, although there was no hostility, there was no change in the opinion in which the doctrines of Hahnemann were regarded by allopaths. He thought they should do nothing that would throw obstacles in the way of others giving professional aid in cases of urgency where homœopaths were in attendance. He alluded incidentally to the museum proposed to be started by the Association, and mentioned the advantages which would result from such an institution. He had no doubt that the College of Physicians and Surgeons would find the room required for such a museum if it were started. He went on to refer to the communication of the Ontario Christian Women's Temperance Association, in which they asked that the profession should abstain from prescribing alcohol as a therapeutic agent. There was a great difference of opinion as to the value of alcohol as a medicinal agent, and the profession could not, of course, be expected to give an opinion contrary to

their convictions. They all sought, however, to promote among the people habits of sobriety, and would do all in their power to aid the temperance organizations in this object.

Dr. Radford, of Galt, showed a patient suffering from chorea, which he had treated without success by the ordinary method. He asked the opinion of the Association.

Dr. Harvey recommended cod-liver oil, maltine, bathing with a solution of Atlantic salt, and friction.

Dr. Zimmerman recommended circumcision if phymosis existed.

Dr. McPhedran presented a case of prurigo which he is treating successfully at present with pilocarpin.

Dr. Ryerson, of Toronto, read a paper on "Cancer of the Larynx," which will be found on another page of this issue.

Dr. Ferguson, of Toronto, read a paper on "Hip-joint Disease."

Dr. Davidson, of Toronto, described what he considered to be a case of superfetation. The patient was delivered of a fetus about four months old, and another of four weeks old. The catamenia never ceased during pregnancy. There were no signs of decomposition on the fetus four weeks old.

Drs. Cameron and Oldright dissented from the opinion of Dr. Davidson.

The President, Dr. Macdonald, said that the absence of putrefaction was a very strong point in favor of Dr. Davidson's position.

Dr. Cassidy read a paper on "Enteric Fever," which he illustrated by specimens.

Dr. Oldright presented the report of the Committee on Public Health. The report drew attention to the increased public interest in the subject, and recommended that the Government should be petitioned to pass an Act making it compulsory on all municipalities to have a local board of health with a medical health officer. Also, that steps should be taken to provide for more efficient instruction in the public schools on the subject of hygiene. An advance copy on the subject of sewage disposal, issued by the Provincial Board of Health, was submitted.

With regard to a communication received from Mrs. Chisholm, President of the Ontario Women's Christian Association, Dr. Oldright regretted that the time at the disposal of the committee had been too short to return a full report. The Committee,

however, felt free to state that in general the use of intoxicating liquors by healthy persons is injurious, and also that the profession believe that disease is very often due to the use of liquors, and that there is a general feeling that attempts should be made to bring about a more restricted use of alcohol.

The report was adopted with the exception of the clause on temperance, which was referred to a committee consisting of Drs. Barrett, Buchan, Workman, George Wright, and Playter, with instructions to report at the next meeting of the Association.

A resolution was also adopted embodying the recommendation of the committee respecting the establishment of municipal boards of health.

The report of the Committee on Medical Ethics was presented, but there being no time for its discussion, it was referred back to the committee with instructions to bring in a more definite report at the next meeting.

The report of the Committee on Surgery was read by Dr. Oldright, and adopted. It dealt especially with the subjects of recent wounds, the reduction of dislocations, the germ theory of disease, the physiology and pathology of the blood, anti-sepsis and drainage.

The report on Medicine was taken as read.

The Hon. Alex. Morris, M.P.P., who had entered the room a few moments previously, was here invited to the platform by the President, and delivered a short address, in which he referred to the noble and elevating character of the profession of medicine.

The reports on Obstetrics and on Necrology were not forthcoming. The Audit Committee reported verbally that they had examined the Treasurer's books and found them correct.

The Committee on Nominations reported, recommending the following elections for the ensuing year. The report was adopted.

President, Dr. D. Clark, Toronto; 1st Vice-President, Dr. Worthington, Clinton; 2nd Vice-President, Dr. Philp, Brantford; 3rd Vice-President, Dr. Richardson, Toronto; 4th Vice-President, Dr. McGill, Oshawa; Recording Secretary, Dr. White, Toronto; Treasurer, Dr. Graham, Toronto; Corresponding Secretaries, Dr. Graham, Brussels; Dr. McKay, Woodstock; Dr. Cameron, Toronto; Dr. Aylesworth, Collingwood.

The following were added to the Standing Committees :

Credentials, Dr. Davidson, Toronto ; Public Health, Dr. Carney, Windsor ; Legislation, Dr. Digby, Brantford ; By-laws, Dr. C. K. Clarke, Kingston ; Medical Ethics, Dr. Campbell, Seaforth ; Nominations, Dr. Buchan, Toronto.

The report on Ophthalmology and Otology was taken as read.

The President and Secretary were requested by the Association to memorialize the Medical Council on the subject of a Provincial Medical Museum, and to bring the matter before the Government.

It was decided that the next annual convention of the Association should be held at Hamilton. The meeting then adjourned *sine die* after passing the usual resolutions of thanks and voting the customary honorarium to the Secretary.

In the evening the Association held a conversatione, the Royal Academy having placed their exhibition rooms at the disposal of the Association. Between seven and eight hundred people were present. A brief address was delivered by Dr. D. Clark, the President-elect.

Interesting exhibits of pharmaceutical preparations were presented by Messrs. Parke, Davis & Co., Detroit, Mich. ; Maltine and Beef Peptonoids by Mr. Gisborne, representing Reed & Carnrick, of New York ; and fluid extracts, &c., by E. B. Shuttleworth, of Toronto. A variety of surgical instruments were also shown by Messrs. Stevens & Son, and E. A. Smith & Co., Toronto.

ONTARIO MEDICAL COUNCIL.

The regular annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario was opened in Toronto on the 12th ult., the President, Dr. Bray, of Chatham, in the chair.

The election of officers was proceeded with, with the following result :—President, Dr. Logan, Ottawa ; Vice-President, Dr. Day, Trenton ; Registrar, Dr. Pyne ; Treasurer, Dr. Aikins ; Solicitor, Dalton McCarthy, Q.C.

Drs. Burns, Day, and Edwards were appointed a committee on credentials. The committee reported as to the correctness of the certificates of Drs. Campbell and Fenwick.

The following standing committees were appointed :—

Registration—Drs. Rosebrugh, Bergin, J. W. Wright, Vernon, Fenwick, and Grant.

Rules and Regulations—Drs. Spragge, Rosebrugh, J. W. Wright, Grant, and Campbell.

Finance—Drs. Edwards, Allison, McCargow, Day, Henderson, and Douglas.

Printing—Drs. McCammon, Day, Vernon, Burritt and Campbell.

Education—Drs. Lavell, Geikie, McCammon H. H. Wright, Edwards, Burritt, Husband, Spragge, Williams, Bray, Burns, and Cranston.

Dr. Bray, the retiring President, then read his valedictory, in which he gave a *résumé* of the business that had officially come under his notice during the past year. He had granted stay of proceedings in only three cases. The first was that of a British graduate who had neglected to register while in Europe ; the second, that of a gentleman who failed in two unimportant subjects last year. The information was laid in February, and as he promised to go up in April for his examination, a stay was granted. Since that time he has passed, and is now registered. The third case was that of a Provincial Licentiate who was informed against for using the letters M. D. after his name, and as he was a regular practitioner of many years' standing, and had a perfect right to practice, a stay was granted. He stated he had been applied to in other cases, but refused to interfere. Several applications for permits to practice were refused. With regard to the cases of young men who had failed to pass on certain subjects, and who were absolutely required to work for a living, he suggested that the representative of that division in the Council should be allowed to deal with them. He also suggested that the curriculum for matriculation should be changed. He believed that so long as the Universities accepted the matriculation of a student any time before graduating, the Council should do the same, provided the four-year course had been complied with. As the New British Medical Act was both liberal and comprehensive and proposes reciprocity, he thought that the profession in Ontario, who were the pioneers in raising the standard of medical education on this continent, should agitate for a uniform bill for all the provinces whereby the standard would be the same, so that a man having passed the Coun-

cil of one province could register in another by merely paying the fee. He suggested also that the examinations should be still more practical, which could best be done by having the examiners appointed for five instead of two years.

Mr. Dalton McCarthy's opinion relating to the representation of certain educational institutions in this Province in the Council was next read. It contended that the Western University of London, Ont., was entitled to a representative, and that "Albert College," "College of Regiopolis," Kingston, and the College of Ottawa were not entitled to representation.

The opinion was briefly discussed and was referred to a special committee composed of Drs. Day, Williams and Burritt.

A number of communications and petitions were read and referred to committees.

The Finance Committee reported that the Council property on the corner of Bay and Richmond streets had been valued at \$14,951, and was now offered for sale.

The meeting then adjourned till ten o'clock the following morning.

June 13th, 1883.

The Council met at 10 a.m., the President in the chair.

Dr. Edwards gave notice that he would move, "That on and after June, 1884, every student who presents himself for the final examination must show himself proficient in case-taking."

Dr. H. H. Wright gave notice of a resolution making a summer session compulsory. It was referred to a committee.

Dr. Bray moved the following amendment to the Council regulations, which was considered in committee, reported, and adopted by the Council:—"The annual meeting of the Council shall take place on the second Tuesday of June of each year at Toronto, when the President, or, in his absence, the Vice-President, shall take the chair, until the Committee on Credentials shall have been appointed and reported, and another President shall have been elected."

Dr. Wright's motion for a summer course, and Dr. Edwards' resolution respecting "case-taking," were discussed and submitted to the Committee on Education. During the discussion on the latter, Dr. Geikie pointed out that in the schools in

Toronto every possible effort was being made to secure the teaching spoken of. Dr. Allison advocated cautious action and thorough investigation before adopting a compulsory change of this kind.

Dr. Edwards moved, seconded by Dr. Vernon, that a public prosecutor be appointed for the Council. He referred to the difficulty of prosecuting by the district authorities, inasmuch as they could not proceed quickly enough to procure the arrest of itinerant illegal practitioners.

Dr. Bray favored the appointment of individual prosecutors in each division.

Dr. Allison favored the appointment of one chief prosecutor, with subordinates, and that all the fines go to the informant, the Council not to meet any costs.

Dr. Lavell contended that the Council was not a detective bureau. He thought that if the standard of the profession was raised as steadily as in the past there would be no need of any public prosecutors, and he opposed any such appointments. In reference to the cases of qualified medical men who allowed themselves to be bought up by quacks, he believed that steps should be taken to urge the universities to take away the degrees of such graduates as would thus disgrace their Alma Mater.

Dr. McCammon was opposed to the appointment of a public prosecutor, as until they got a clause added to their Act empowering them to annul the degrees of such registered medical men, no prosecutor would be able to stamp out quackery.

Dr. Geikie thought that perhaps some of the laws might be brought to bear on those people who were, so to say, medical peddlers, who levied blackmail on the public. He thought that outside of these people there were very few quacks in the land compared with parts of the United States.

Dr. Burns thought the Council could not be expected to act as detectives, but that the duty of the Council was to protect legitimate practitioners.

Dr. Grant thought the Government should be asked to place a special tax upon each quack advertisement inserted in the press, and this would be an effective way of putting an end to quack literature. He favoured the appointment of a prosecutor in each section, who would act under instructions from the representative of the Council.

Dr. Burritt opposed the appointment of a public prosecutor.

Dr. Day stated that in the State of Illinois the Medical Board was empowered to annul the license of doctors engaged in unprofessional business. They should take means to obtain similar powers from the Ontario Legislature.

The motion was then submitted and lost.

Dr. Burns gave notice of a motion to change the mode of electing the territorial representatives in the Council.

The Treasurer, Dr. Aikins, presented his annual report, which showed the following:—Receipts from examination fees, \$3,145; registration fees, \$1,642; assessments, \$791; rent of hall, \$25; fines on unlicensed practitioners, \$255; balance in hand, June, 1882, \$1,568; total, \$7,426. The balance now in bank to the credit of the Council, after deducting all expenditures for the last fiscal year, is \$2,163.98. About \$5,000 were due from unpaid assessments. The balance in hand was not sufficient to pay for the expenses of the present session and accounts due. For some years past no payments had been made on the hall. In order to meet prospective outlay it was necessary that steps be taken to enforce the payment of all outstanding assessment fees. The report was referred to the Finance Committee, and subsequently adopted.

The Council then adjourned till ten a.m. tomorrow.

June 14, 1883.

The Council met at 10 a.m. After routine, a discussion arose on the subject of needful amendments to the Medical Act. A motion by Dr. Allison was adopted, ordering the re-appointment of last year's Legislation Committee, with instructions to consider and draft such amendments as may be considered necessary, and to report to the Council next year.

Dr. Edwards presented the report of the Finance Committee, which was adopted. The total assets of the Council are \$25,481, including annual dues uncollected, \$5,318, and buildings and grounds, \$18,000. On the building there is a mortgage of \$6,000. The expenses of the present Council are \$1,300.

Dr. Rosebrugh read the report of the Registration Committee, which was adopted. Several applications for registration were refused.

Dr. Lavell presented the report of the Education

Committee. Most of the petitions from students, including several for supplementary examinations, were refused. Dr. Edwards' resolution concerning clinical "case-taking" was considered, and while the committee appreciated the importance of the suggestions, they recommended no action at present. Dr. Wright's resolution anent a summer session was considered, and the committee, while fully appreciating its desirability, and the relief its establishment would afford to the excessive work of the winter courses, deemed it inadvisable to give it definite shape. The following committee was recommended to review during the recess the curriculum of study endorsed by the Council:—Drs. Fenwick, Lavell, Macdonald, Bray, Bergin, Cranston, and Logan, the travelling expenses of the committee to be paid by the Council.

During the discussion of this subject, Dr. Geikie moved that the report be amended by adding a clause to the effect that the said committee were merely suggestive, it being the fixed policy of the Council not to make any changes in the present excellent curriculum which were not imperatively called for, and that every suggested change should be well and carefully considered before being adopted. The amendment was lost.

The Board of Examiners for 1883-84 is as follows:—Anatomy, descriptive, Dr. J. Fulton, Toronto; Medicine and Pathology, Dr. A. S. Oliver, Kingston; Midwifery, Dr. B. E. Burdett, Belleville; Physiology, Dr. G. A. Tye, Chatham; Surgery, Dr. W. Canniff, Toronto; Chemistry and Toxicology, Dr. M. Barrett, Toronto; Materia Medica and Botany, Dr. W. Dickson, Pembroke; Medical Jurisprudence and Sanitary Science, Dr. W. Nichol, Brantford; Homœopathic Examiner, Dr. C. W. Clark, Aylmer; Medical and Surgical Anatomy, Dr. Eccles, London.

Dr. Day submitted the report of the Committee on Legislation, with regard to the right of certain members to sit at the Council. The Committee had received from the representatives of Albert College, Belleville, and the Ottawa University, sufficient proof of the right of those institutions to representation. Nothing was adduced concerning Regiopolis College. The report was adopted.

The following were appointed as an Executive Committee:—The President, Vice-President, and Dr. Bray.

The Registrar was ordered to address circulars to all practitioners in arrears, to the effect that unless the amount due by them be paid within three months, legal action will be taken.

After passing resolutions of condolence with the families of departed members, and of thanks to the president and officers, and also adopting an address to be presented to the Governor-General and Princess Louise, the Council adjourned.

ONTARIO BRANCH MEDICAL ASSOCIATION.

The semi-annual meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on the 21st of February.

Dr. Dingman of Listowel reported a case of gangrene which followed tapping a hydrocele. No injection was used; patient was 53 years of age. Twenty-four hours after tapping, found him partially unconscious and apparently suffering severe pain. Temperature 101° ; scrotum and penis œdematous. From this point the gangrene spread upwards as far as the left nipple, and half way down the thighs on both sides. Notwithstanding all that could be done he died four days after the operation.

Dr. Graham of Brussels presented a typical case of progressive muscular atrophy. J. W., a farmer, aged 52. Has been healthy up to present attack. Never received any injury excepting a fall from a hay-loft five years ago. Has not had typhoid fever or rheumatism; no lead poisoning; denies syphilis. The first symptoms he noticed last harvest while trying to thrust the knot under the band with his thumb in binding sheaves. His strength is gradually diminishing; has had no fever, no muscular pains; sensation perfect. Temperature of left hand low, feels cold there more readily than elsewhere. Fibrillary twitching is well marked. The muscular atrophy is quite evident in the thenar muscles and interossei. The middle fibres of the trapezius inserted into the spine of the scapula are perceptibly diminishing. Deltoid not yet affected.

Owing to the small attendance due to the snow blockade, the meeting was postponed to the 3rd of May.

Palmerston, May 3rd, 1883.

In the absence of Dr. Stewart, Dr. Yeomans of

Mount Forest was called to the chair. The minutes of last meeting were read and approved.

Dr. Gun of Durham read a very interesting paper on injuries of the brain, accompanied by a report of four cases from his own practice.

Dr. Yeomans reported a severe case of fracture of the skull extending from the foramen spinosum to the auditorius externus, then upward through the squamous portion of the temporal bone, crossing the middle meningeal artery.

Dr. Cotton of Mount Forest read an extremely interesting report on three cases of equinia, which disease, fortunately, is not a very common one. Two of the patients, father and son, were inoculated by the discharges while attending a glandered mare in foaling. The third was supposed to have received the infection while sawing logs drawn by horses affected with the disease. The general symptoms were as follows: chills, vertigo, pains in the head, muscles, joints and bowels, diarrhœa, tongue furred, dry, with brown centre, sordes on teeth, bowels tender and tympanitic, discharges from the bowels frequent, black and very offensive, urine scanty, high temperature, slight delirium. They exhibited the characteristic eruption, about the size of a split pea, hard at first, then becoming pustular or vesicular with a bright inflamed margin. In one case abscesses formed throughout the body. One died comatose; none recovered.

Dr. Stewart of Palmerston reported a case of occlusion of the os at labour occurring in his practice which terminated successfully.

Dr. Graham shewed a number of microscopical specimens amongst which were diphtheritic micrococci.

It was resolved that the next meeting should be held in the same place on the first Thursday in September.

NOVA SCOTIA MEDICAL SOCIETY.

The annual meeting of the Nova Scotia Medical Society was held at Truro on the 20th ult. The opening address was delivered by the President, Dr. Slayter, of Halifax. The election of officers for the ensuing year resulted as follows:—President, Dr. J. S. Somers, Halifax; 1st Vice-President, Dr. H. McPherson, Sydney, C.B.; 2nd Vice-President, Dr. Stewart, Pictou; Secretary & Treasurer, Dr. McDonald, Londonderry. Sydney, C.B., was fixed upon as the next place of meeting.

Selected Articles.

JUNKER'S ANÆSTHETIC APPARATUS.

This apparatus, by which an anæsthetic is not only administered economically, but also in regulated dilution, being now much used both in England and elsewhere, Messrs Krohne & Sesemann, Duke-street, makers, give the following description of its construction and method of employment:—The apparatus consists of three main parts: A bottle holding about two ounces, closed by an air-tight fitting top, through which two tubes are made to pass, a long one, connected with a Richardson's bellows, and a short one, connected by means of India-rubber tubing with a vulcanite face-piece. The bottle for holding the anæsthetic fluid is covered with leather, and the lower half is graduated for eight drachms. The face-piece is provided with an inspiratory and an expiratory valve.



When using the apparatus, from four to six drachms of chloroform or bichloride of methylene should be poured into the bottle according to the expected duration of the operation; it is then suspended from a button-hole in the coat of the ad-

ministrator. By each compression of the bellows about 4.33 cubic centimètres of fresh air is forced through the long tube into the fluid, and escapes impregnated with the vapour in proportion to the contents of the bottle, through the short tube into the face-pipe. During the use of this apparatus, fresh air impregnated with fresh narcotic vapour is brought into the face-piece with each compression of the bellows, and if the latter be correctly timed, so as to correspond with each inspiration, the whole of the vapour is inhaled, and on each expiration the exhaled air escapes through the valve and at the edge of the face-piece, so that the patient does not inhale his own breath. The patient has not to breathe through this apparatus as is the case with most inhalers.

It will be noticed, that as the quantity of fluid in the bottle decreases, so does the amount of evaporation, thus a proportionately increasing dilution of the vapour with air is going on from the first. Taking into account that the quantity of air supplied by the bellows with each compression is but from $\frac{1}{15}$ th to $\frac{1}{18}$ th part of air required by an adult for one inspiration, the amount of narcotic vapour used in proportion to the quantity of air which enters the face-piece through its valve and sides, is incredibly small. Experience has proved that this small quantity is sufficient to maintain anæsthesia throughout severe and prolonged operations, the administrator having full control over the supply, and no waste of the anæsthetic, so annoying to the operator and the administrator, can occur.

The merits of this apparatus have long been recognised at the Samaritan Free Hospital. It is especially recommended by Sir Spencer Wells in his work *On Ovarian and Uterine Tumours*, page 277. For sixteen years no other apparatus has been employed at that hospital, for the long operations so frequently performed there—*British Med. Journal*.

DISLOCATION OF THE HUMERUS REDUCED BY KOCHER'S METHOD.

The following notes in the *London Lancet*, April 14th 1883, Mr. W. Chisholm, house-surgeon, University College Hospital, gives. In the *Lancet* of Nov. 4th, 1882, p. 773, attention was called to a paper on the method of reducing dislocation of the shoulder, read by M. Kocher at the meeting of the International Congress in London. Referring only to the subcoracoid form of the dislocation, M. Kocher directs that for its reduction the surgeon should sit on the left of the patient, then the elbow-joint is to be flexed at a right angle, and the joint firmly pressed against the side of the chest. Next, while the elbow is still held in contact with the body, the arm is to be slowly, gently, and steadily rotated out until firm resistance is encountered;

then while this rotation is maintained the arm is to be raised forwards, and a little in, and, lastly, to be rotated in, and the hand brought towards the opposite shoulder. This plan has been tried in six of the cases which have come to University College Hospital during the last five months.

Case 1.—A muscular young adult, with left subcoracoid dislocation. An attempt was made to reduce it with the knee in the axilla, but as this caused much pain the patient was given an anæsthetic. While this was being administered it was decided to give Kocher's method a trial. The patient lying on his back, Mr. Heath flexed the elbow at a right angle, pressed it firmly against the side of the chest, the arm was then rotated outwards, and the head of the bone slipped into the glenoid cavity before the forward movement of the arm was commenced. This case came on just a day before Mr. Heath's expected visit, and was kept so that the students might see it reduced.

Case 2.—An adult female, with right subcoracoid dislocation. This was the first case attempted by this method without an anæsthetic. The patient was seated in a chair, and an attempt was made to reduce the dislocation in the manner described. This was unsuccessful, and the patient was told to lie down on a couch with a view to having an anæsthetic. While in this position and before giving the anæsthetic, another attempt was made at reduction by manipulation, the arm being more firmly pressed to the side. On rotating outwards a little grating was felt, and just as the outward movement of the arm was commenced the head of the bone slipped into the normal position. Patient experienced very little pain.

Case 3.—A young male adult with right subcoracoid dislocation. He said his arm had been "out" before. In this case reduction was effected with the greatest ease without an anæsthetic, patient being seated in a chair; the head of the bone returning to the glenoid cavity at the commencement of the forward movement.

Case 4.—Similar to Case 3, except that there had been no previous dislocation.

Case 5.—A coal-heaver, a muscular man, with a right subglenoid dislocation. Patient was seated in a chair and reduction effected with some trouble, and only after the elbow was very firmly pressed against the side of the chest; at the commencement of the forward movement the bone slipped into its place.

Case 6.—A male adult, a muscular man, with right subcoracoid dislocation, was seen about noon. He had been drunk the previous night, and did not know how the injury was caused. In this case until an anæsthetic was given the bone could not be disengaged, and the attempt gave very much pain. When the patient was under chloroform reduction was readily effected. In this case the right hand was brought nearly to the opposite shoulder.

Out of six cases five were subcoracoid, and one subglenoid; and though M. Kocher's paper seems only to refer to the former injury, the subglenoid dislocation was reduced by his method without an anæsthetic. Of the five subcoracoid cases three were reduced without an anæsthetic; but in the first case Kocher's method was not tried until the patient was under chloroform. By this manipulation the margins of the rent in the capsule are relaxed, and the rent opened out, thus allowing the head of the bone to slip readily into the glenoid cavity.

JEFFERSON COLLEGE CLINICS.

CHRONIC ARTHRITIS OF KNEE.

The following clinic by Dr. R. J. Levis is taken from the *Col. and Clin. Record*, Philadelphia.

This young man, 18 years of age, about ten months ago received a severe injury about the knee by a heavy piece of timber falling across his leg. He subsequently suffered with chronic inflammation of the knee-joint, for which the usual methods of treatment have been pursued in vain.

I find here a good deal of tenderness and stiffness on motion. The limb cannot be entirely straightened. I intend to give him ether, then extend the limb, and apply the actual cautery to the sides of the joint. I know of no other remedy that will have the same effect as the cautery. These patients have generally gone through all the ordinary forms of treatment by blistering, iodine, and other counter-irritants, before they get to this stage. I am now applying the hot iron to the joint, over the condyles and below them, on the outside as well as on the inner side of the joint. It is not worth while to apply the cautery except to do so to the extent of producing complete localized destruction of the integument. I now will attempt to move this joint and break up adhesions, straightening the limb as much as possible.

I find here a good deal of contraction of the ham-string tendons, especially the bicep. This may require a future tenotomy.

To the surface cauterized with iron, I am now applying carbolic acid in concentrated form in order to prevent pain. The benumbing influence of undiluted carbolic acid is so great as to prevent all pain from burning when the effect of the anæsthetic passes off. He shall now have a wet dressing applied around the joint, and a posterior straight splint applied.

CHRONIC ABSCESS IN THE ABDOMINAL WALL.

This boy is 15 years of age; he comes here on account of superficial enlargement in the left hypochondriac region. I find on the abdominal surface a fluctuating tumor in this position, which he says is tender upon pressure. He has no enlarged

glands behind the neck or elsewhere. This is evidently a cyst; there is fluid of some kind in this swelling. The tumor cannot be made to retire into the abdomen upon pressure, and upon coughing no impulse is communicated; on telling him to rise up without resting on his elbow—thus making the abdominal muscles tense—I find that the growth is freely movable on their surface, and there is no increase in the tension of its contents.

The question is whether it is a simple cyst or connected with the peritoneal cavity? I have just demonstrated that its tension was not increased by increasing the general intra-abdominal tension. I believe, therefore, that it is an independent growth. Using a hypodermic needle I determine its contents to be pus, which we will remove by aspiration through this needle.

TUMOR OF NECK.

This patient, 28 years of age, says he has had enlarged lymphatic glands in the neck for about five years. They are quite large immediately under the jaw on both sides, and especially on the left side of the neck, where a mass of them form quite a tumor. These are quite hard, the skin overlying them seems healthy.

I am in the habit of treating these enlarged glands with hypodermic injections of alcohol. Formerly I used tincture of iodine, but I believe that I get as much good from the alcohol alone, as from the tincture. The iodine is not a specific, but the injection merely acts as a stimulant; this is all that can be accomplished. About ten drops of undiluted alcohol are usually sufficient for one gland. First fix the tumor, and steady it, then inject the alcohol directly into the middle of it. I have seen the alcohol occasionally produce suppuration, which usually is not to be desired, although it would not be a calamity in this case. These injections can be repeated about twice a week. He had the usual internal treatment with iodine and chloride of ammonium, both of which have failed.

CYSTIC THYROID TUMOR.

This man, 60 years of age, presents a large growth over the thyroid gland. It is evidently a cyst, a hygroma, as it is called, probably an enlarged mucous bursa. It moves with the larynx. I will inject carbolic acid as before, in the treatment of hydrocele, after aspirating the cyst. I have added a little water or glycerine to the carbolic acid, for fear it may solidify in the tube and choke it up.

ANCHYLOSIS OF KNEE JOINT.

This case you saw recently; it is one we have had under consideration for some time; and it has been the subject of consultation with the staff of the hospital and Professor Gross.

This boy came before you with a very bent limb,

and, moreover, it was considerably shortened. At one time the propriety of performing a partial excision of the bone had been discussed, probably with a view to producing a false joint. I do not know the history of the case; as you see, he has now bony ankylosis at the knee, which is flexed at a right angle.

There is a question here between excision of the knee joint and amputation of the thigh. Probably taking out a wedge-shaped piece of bone from the femur might give us a straighter limb. The other leg is normal, although in walking he is obliged to stoop down, in order to accommodate himself to the deformity. He has never used crutches, but walks in a stooping or squatting posture. We have explained to him the risks of the different forms of operative procedure I have named; I do not think really that there is much less risk in excision than amputation. I would favor removing a wedge-shaped piece from the front of the femur, just above the joint, but, as I have said, I do not believe that the danger is really much less than from amputation. But, after all, I think that he would have a much more useful limb after this operation, than if he had an artificial one, although it would necessarily be a little shorter than the sound limb.

NÆVUS MATERNUS.—LITTLE.

The patient I now present to you is about six months old, and has a small vascular tumor on the left side of the forehead. It is, as you see, of about the size of a hickory-nut. Its summit is of a bright-red color, while the outer margins of the tumor seem to be covered with healthy skin. On making pressure upon it with my finger, the swelling almost entirely disappears; and upon removing the pressure, it slowly assumes its former size. This tumor is what is known as a nævus. It is also known under the names of aneurism by anastomosis, or erectile tumor, or angioma. It is a disease of the capillaries. The mass of the tumor is made up of capillary vessels freely connecting with one another. The form here presented is of the cutaneous variety. Upon an examination of the abdomen of the child we find another one of nearly the same character. It does not seem to be as deeply situated, however, for the integument does not form any portion of its covering. It is flatter than the one upon the face and somewhat larger. The surface presents a whitish appearance in several places, as if cicatrization was taking place. These tumors may occur upon any part of the body. They are congenital, and are frequently called mother's marks. When first noticed they are generally very small, but gradually become larger. In a certain number of cases they seem to disappear spontaneously. The one on the abdomen of the child seems to be undergoing this process of cure,

the whitish spots on its surface being indicative of a change. The one on the forehead, however, the mother tells us, is rapidly becoming larger. I have met with a large number of examples of this disease, and I have never failed to cure the cutaneous variety by the introduction of heated needles into the base of the tumor. If the tumor be small, one operation is generally sufficient; in larger tumors several operations may be required before the cure is complete.

I will now proceed to operate upon this case. But, first, as to the needles used. It has always been my practice to employ a shoemaker's awl, which is slightly curved at the point and flattened. Such an instrument is much larger than the needles that are generally used for this purpose by surgeons. My assistant holding the child, I place the head between my knees, face upwards; in this way I have perfect control of its head, and am now ready to proceed. Another of my assistants holds the alcohol lamp at my right side, in which I heat the end of the awl to redness, and then plunge it into the tumor. The manner of introducing the awl is of importance. It should be thrust into the base of the tumor and towards the centre, not into the top. Holding it here a moment, I withdraw it and reheat it preparatory to a second introduction. There is scarcely any bleeding. This procedure is repeated until the entire circuit of the base of the tumor is completed. Please observe that I plunge the awl in at the juncture of the skin with the tumor and push it downwards and inwards. If punctures are made only in the top of the tumor, very little is gained by the operation. You should strive to destroy the vessels at its base. Having completed the circuit, I now make a few punctures in the most prominent part, over the surface of the *nævus*. The swelling has now become very much reduced in size. One of the punctures which I have just now made in the surface of the tumor is followed by a free flow of blood almost equal to an arterial jet. A second introduction of the needle fails to arrest the hemorrhage. Under such circumstances, you will find that the best method of arresting the bleeding will be to make firm pressure over the bleeding point with a sponge for a few minutes. This I have never known to fail in stopping it. The needle is introduced at a black heat; that is to say, although it is heated to redness in the flame of the lamp, before you reach the tumor the redness has disappeared. Although the child cried during the operation, it did not seem to be suffering very much, and now that I have completed the operation the patient has ceased crying. No special dressing is required. I generally advise, however, that the part be covered with a light compress, wet with cold water during the first night.

Two weeks later the patient was again brought to the clinic, when it was observed that a decided

change for the better had taken place, the tumor having shrunk to less than one-third its former size. It was much flatter, and the redness over its surface had almost entirely disappeared, except at one or two points. Two or three additional punctures with the hot awl were made, it being introduced as before into the base of the vascular prominences rather than into their summits. It was predicted that the second operation would be all that was necessary to effect a cure, and that only a very slight cicatrix would remain. There are two other ways of heating needles, namely, by means of galvano-cautery and Paquelin's thermo-cautery. The points coming with these apparatuses, however, are larger than the awl I have used, and the apparatuses themselves are clumsier and much more expensive than the simple alcohol lamp and shoemaker's awl.—*Med. News*.

SURGICAL EXPEDIENTS IN EMERGENCIES.

At a recent meeting of the Medical Society of the State of Pennsylvania, Dr. R. J. Levis, of Philadelphia, gave an account of some ingenious expedients he had contrived in some of those surgical emergencies in which the skill and readiness of the surgeon are often severely tested. The *Medical News* describes some of these as follows:

In case of an *overdistended bladder*, where prompt relief is necessary and no catheter is at hand, he had taken a piece of bell-wire doubled upon itself so as to form a loop, which was readily passed along the urethral canal into the bladder. In a female a rye-straw might be used, its end being rounded with a little sealing-wax, or the stem of a clay-pipe, as crude substitutes for a catheter. In *phlebotomy*, when a proper lancet is not at hand, an ordinary pocket-knife will answer, provided the vein be held in position by transfixing it with a needle after applying the ordinary bandage.

For *obstinate epistaxis* requiring plugging of the nostril, a piece of sponge to which a string is fastened, is forced through the meatus to the posterior naris, small pieces of sponge are then to be threaded on this cord and pushed in succession into the passage until it is filled; when the danger of hemorrhage is over, they can be removed by reversing the process. Another good method in an emergency is to take a portion of the intestine of a chicken or other small animal, close one end and pass it through the meatus; water or air may now be forced into the portion in the nostril so as to make equable compression. If it is necessary to plug the posterior nares, a slender gum bougie, or a piece of thick catgut ligature may be passed along the floor of the nostril and brought out under the soft palate; a string can then be attached and brought out of the nose in front by

withdrawing the bougie; the sponge can then be employed in the usual manner.

In a case of *bleeding from an intercostal artery* from a homicidal wound, he had succeeded in arresting the hemorrhage by introducing the upper part of an ordinary key into the pleural cavity, then turning it at a right angle, and making pressure upon the vessel. After this had been continued for some hours the bleeding ceased.

A very efficient substitute for the *Esmarch elastic bandage* is a flannel roller cut bias. For dislodging and forcing downward a *foreign body in the œsophagus*, an ordinary carriage or riding whip, knotted sufficiently far from the end to ensure flexibility, may be used.

Good temporary *dressings for fractures* may be extemporized by tearing palm-leaf fans into strips; a more permanent fixed dressing can be made by dipping ordinary sand-paper in hot water, and applying it while soft; it adapts itself to the shape of the limb, but becomes sufficiently strong and rigid afterwards; hard dressings can also be made with starch, or eggs and flour.

In moving a patient with *fractured thigh*, the sound limb may be made into a splint by fastening the legs together. In treating fractures of the femur, complicated apparatus is not necessary; simple extension by weights is all-sufficient, the limb being kept in position by lateral supports or sand-bags. The postural method without splints is to be preferred in all fractures near to joints; fracture of clavicle is best treated by the supine position, with the head slightly elevated.

An ordinary gimlet is an efficient instrument with which to *open the mastoid cells* in case of abscess and threatening cerebral complication. The carpenter's rasp may sometimes replace the trephine in replacing fragments of bone after fracture of the skull.

A rubber tube may be used instead of a syringe in cases of *obstruction of the bowels*, the fluid being injected by hydrostatic pressure.

The substitution for belladonna of stramonium where a mydriatic is needed, and replacing carbolic acid by sulphurous acid as a disinfectant; and the employment of hot water in place of all other styptics, were also mentioned.

PRACTICAL POINTS FROM PHILADELPHIA CLINICS.

Dr. Carl Seiler removes polypi from the nasal cavities with the snare, as this causes less bleeding than the polyp-forceps, and touches the galvano-cautery. This prevents the return of the growth, which nothing else will, the doctor having tried iodine, chromic acid, etc. This procedure certainly merits further trial.

Dr. Wharton recommends that superficially situated nævi be cauterized with the strong nitric acid, applied with a glass rod. The resulting slough is followed by a white cicatrix. More extensive nævi call for other treatment.

For catarrhal, or herpetic, or diphtheritic tonsillitis Prof. Pepper recommends, constitutionally absolute rest, large doses of quinine, drop doses of tincture of aconite, and liquid diet, and locally the application of the muriated tincture of iron.

Prof. Tyson often prescribes a mustard plaster prepared with molasses instead of water. For prolonged and mild counter-irritation this acts excellently, as patients often have the plaster on their backs for hours while fulfilling their daily duties. Dr. Tyson also has great faith in jaborandi and its active principle, pilocarpin, in the treatment of uræmia. He considers it *the* remedy for such cases. In Bright's disease and in diabetes the doctor prescribes an exclusive milk diet. He gives only skimmed milk.

Dr. Strawbridge poultices the external ear in the following ingenious manner: He lays the patient's head on the table and fills the external ear with as hot water as can be borne. Over the ear are applied towels soaked in very hot water, the surplus water being drained off by squeezing the soaked towels between dry ones.

For eczematous sores in children and old people Dr. Duhring recommends an ointment of five grains of iodide of lead to the drachm of vaseline.

Dr. Louis A. Duhring recommends for acne, sulphur in some form; preferably the sulphide of calcium internally, and locally the following prescription at bedtime:

R	Sulphuret. potash,	3 ss,
	Sulphate zinc,	3 ss,
	Glycerine,	3 j,
	Alcohol,	fl 3 j,
	Water,	fl 3 j. M.

Dr. Ellerslie Wallace describes nux vomica as the great invigorator of the sexual organs. He gives the one-half to one-grain dose of the extract of nux vomica three times a day after meals.

Dr. John Ashhurst, Jr., says it is the surgeon's rule for ligation of an artery to cut down over the pulsation of the artery where he feels it. Of course the surgeon should know the anatomy of the parts, as well as the lines for cutting as laid down in the books.

Prof. De Costa says do not aspirate pleuritic effusions as long as no urgent symptoms, such as failure of the heart and symptoms of blood-poisoning, demand it, for the liquid will generally reaccumulate, and the second time it will be purulent. Give iodide of potash and other remedies to promote absorption and to make the kidneys act. For the latter the infusion of juniper and jaborandi inter-

nally, and dry cupping over the region of the kidney will be often of benefit.

Prof. Tyson divides the treatment of acute rheumatism into three kinds to suit different types of cases. Rheumatism occurring in persons of nervous rheumatic temperament who lead a sedentary life but are otherwise well fed and clothed, should be treated by salicylic acid or the salicylate of sodium; twenty grains of the latter every four hours for the first twenty-four or forty-eight hours. Continue the medicine after convalescence is established for some time—about as many days as the disease itself lasted. Rheumatism occurring in obese persons who are free livers and who use malt liquors will be best treated by the alkaline treatment. One and a half drachms of bicarbonate of soda in lemon-juice every four hours for four days, afterward twenty grains three times a day combined with iron and quinine. Rheumatism occurring in anæmic persons who have been under-fed and overworked should be treated with the tincture of iodine. When the types shade into each other give the salicylic acid with the other treatment. The diet should consist of skimmed milk, chicken or mutton soup, beef broth, or other liquid diet. Anodynes and the old "six-weeks-abad" treatment have gone out of date.

Dr. Wm. Goodell, the world-famed gynecologist of the university, recommends:

R Carbolic acid, 3 j,
Morphine sulphate, gr. x,
Boracic acid, 3 ij,
Vaseline, 3 ij, M.

for pruritus vulvæ, and also the patting of the parts with a sponge soaked in boiling-hot water. This is also a most excellent application for that rawness so often found between the thighs of the newly born.—*Med. Herald.*

COMPOUND COMMINUTED FRACTURE OF THE SKULL; TREPHINING.

Dr. A. D. Murray reports the following cases in the London *Lancet*, April 28th, 1883:

On October 26th, 1882, I was called to see H. G.—, a man about thirty-eight years of age, who had been thrown out of a cart. I found him suffering from a downward dislocation of the shoulder and a severe wound of the head. After reducing the dislocation I examined the head, and found that there was an extensive fracture of the parietal bone, a triangular fragment being deeply depressed and driven under the sound bone. From the depression fissures could be felt running downwards for about an inch and a half towards the eye and ear. The man had very slight symptoms of concussion and none of compression; but looking at the amount of depression I resolved to trephine

without waiting for symptoms to come on. The operation was performed in the usual way. A little more than half a circle was removed from the sound bone above the apex of the triangular depressed portion, and after a corner had been removed by means of the saw the piece was easily lifted out; a clot was found under this. The middle meningeal could be seen pulsating at the lower corner, but was uninjured. Some fragments were taken away, the wound dressed with carbolic oil, and washed frequently with carbolic spray. The man made an excellent recovery, never having had a bad symptom.

I think that this case points strongly to the advisability of trephining at once in compound comminuted depressed fracture of the skull, without waiting for symptoms of compression. The operation does not add to the patient's danger, and may, in all probability, be the means of preventing serious complications. I feel sure that had the sharp point of bone remained pressing on the membrane serious irritation would have followed, and that the operation would ultimately have had to be performed under much less favourable circumstances.

PHOSPHATES IN MEDICINE AND SURGERY.—*La Tribune Médicale*, No. 764, contains a very interesting review of the use of phosphate of lime in medicine and surgery. Rachitis, osteomalacia, caries, etc., yield to a course of this remedy, to say nothing of its value in hastening the union of fractures. Twenty years ago Piorry advised its administration to pregnant women from the third month to the end of gestation. He also gave it in phthisis, etc. At that time the remedy was used empirically; to-day we know the *rationale* of its action. It is mainly to Dusart that we owe this latter knowledge. In 1869 he published his exhaustive and satisfactory experiments, which demonstrated:

1st. The presence of phosphate of lime is necessary in the process by which the albuminous material furnished by the food becomes transformed into the tissues of the body.

2nd. The vitality and animal heat in animals are in direct relation with the amount of phosphate of lime contained in their organization.

3d. In case phosphate of lime is not supplied, the tissues draw in their need upon the skeleton, which by consequence suffers, just as the adipose tissue is made to yield the hydro-carbons where these are wanting in the food.

The phosphate is not taken up in the stomach, because it is insoluble, but here is where the labors of Dusart have again come to our aid in giving us the soluble lacto-phosphate of lime.

This salt, administered to infants, causes them to increase remarkably in health and vigor. In rachitis the hospitals of Paris furnish hundreds of cases of its good effects. In one case most marked,

where death was almost impending, the child was restored completely to health by the use of Dusart's syrup of the lacto-phosphate without the administration of any other remedy. Prof. Pacquet, of Lille, as long ago as 1872, spoke of its marked benefit in all cases of malnutrition. He especially accords to it an undoubted value in the treatment of fractures, and enumerates among others a case of fracture of the anatomical neck of the humerus, recovery in thirty-two days; a fracture of the olecranon in eighteen days; two fractures of the thigh, one cured in fifty-two days, the other in fifty-five; fracture of the lower jaw in fifteen days; a compound comminuted fracture of the leg in seventy-two days. He concludes: One has only to compare a series of cases of fractures where the lacto-phosphate of lime has been used with a series in which it has not been used to note a remarkable difference in favor of the salt.—*Cin. Lancet and Clinic*.

RHEUMATISM AS A NEUROTIC DISEASE.—In the *Medical News* Dr. Webster Smith communicates an interesting and rare example of a case of acute articular rheumatism occurring in a child two years and a half old. Commenting on the case, the editor observes that Dr. Smith very acutely says that the question of cerebro-spinal meningitis was considered in making up the diagnosis. The joint-changes which ensue in cases of meningitis have been described by Prof. Charcot and others. The late Prof. J. K. Mitchell advocated the neurotic origin of rheumatism, and his son, Dr. Weir Mitchell, has published many observations proving the dependence of joint-changes on spinal and nerve lesions. It is now, indeed, established that changes in the joints, which can not be distinguished from those of acute rheumatism, occur in cases of disease and in lesions of the spinal cord, the membranes, and the nerve-trunks. This admitted, the case of Dr. Smith may be regarded from this point of view. The joint inflammation, the hyperpyrexia, the opisthotonus, and the muscular (choreic) spasms, the whole, concluding with coma, may be regarded as due to a common factor, meningitis. Whether one or the other view be taken, the case admirably illustrates the remarkable correspondence between acute rheumatism and certain spinal affections, and goes far to prove their community of origin. This admitted, acute rheumatism becomes not merely an inflammation of the fibrous tissues, but a neurotic affection.—*Medical Times and Gazette*.

A READY METHOD OF OBTAINING LOCAL ANÆSTHESIA.—Dr. Cheize, in *Jour. de Med. et de Chir. Pratique*, says among the difficulties which surgeons in this country frequently encounter, and must promptly overcome, is the paucity of surgical instruments and appliances. The want of a Rich-

ardson atomizer I had recently to supply in the following manner:

A young girl presented herself with inverted toe nails and solicited an immediate operation, *i.e.* extirpation. I imbibed with ether a piece of cotton wadding of the size of five francs, and placed it upon the big toe, and with a common hand bellows I blew on it for a few minutes, until complete evaporation had taken place. I saturated the cotton wadding a second time, and again manipulated the bellows. In less than five minutes anæsthesia was complete. I extirpated the ingrown nail, and applied to the matrix the actual cautery without the patient experiencing the least pain. I had to exhibit the extirpated nail in order to prove to her that the operation was performed. This is an anæsthetizing apparatus of the greatest simplicity, and within reach of any one. Is it new? I do not know. It is certainly very simple. Country practitioners may find it of great value.—*St. Louis Med. and Surg. Jour.*

ATROPIA FOR EAR-ACHE.—The *Boston Jour. of Chemistry* says that Dr. A. D. Williams recommends its use as follows:—The solution is to be simply dropped into the painful ear, and allowed to remain there from ten to fifteen minutes. Then it is made to run out by turning the head over, then being wiped with a dry rag. The solution may be warmed to prevent shock. From three to five drops should be used at a time. The strength of the solution must vary according to the age of the child. Under three years one grain to the ounce, and over ten years four grains to the ounce of water. In adults almost any strength may be used. All ages will bear a stronger solution in the ear than in the eye. The application should be repeated as often as may be necessary. Usually a few applications will stop the pain. In acute suppurative inflammation of the middle ear and acute inflammation of the external meatus, atropia will only slightly palliate the suffering, but in the recurring nocturnal ear-aches of children it is practically a specific.—*Med. and Surg. Reporter*.

SCARLATINAL INOCULATION.—Dr. Stickler has reported in the *Medical Record* (quoted by the *Cincin. Lancet and Clinic*) a number of vaccinations with mucus from the Schneiderian membrane of the horse affected with modified scarlatina. He vaccinated twelve patients who had never had scarlatina with the equine virus, and after all symptoms from that had subsided he injected subcutaneously some "human scarlatinal blood." The vaccinations with the equine virus were all followed with symptoms characteristic of mild scarlatina; the after injections of scarlatinal blood produced no effect whatever. From these experiments he adduces the following points:

"First—The safety in using subcutaneously the virus obtained from the horse.

Second—That when this virus is implanted in the human tissues, there follows a local eruption similar to that seen in mild cases of scarlatina.

Third—The system appears to be protected against the action of the human scarlatinal poison after vaccination with the equine virus."

TREATMENT OF FLOATING KIDNEY BY FIXATION.—We are informed that Dr. David Newman, of Glasgow, has performed for the first time in this country the operation of nephroraphy. The operation was performed in the following manner: The kidney was exposed by a vertical incision in the right loin, immediately external to the outer edge of the quadratus lumborum, and extending from the lowermost rib to the crest of the ilium; the capsule of the kidney was opened and stitched to the edges of the wound; and two catgut sutures were passed through the cortex of the kidney, the muscles, fascia, and skin, and secured externally by buttons. The patient suffered from severe symptoms, and was treated for several years without success; but since the operation the symptoms have entirely disappeared, and she has now almost recovered from the effects of the operation, which was performed three weeks ago.—*Lou. Medical News.*

JEQUIRITIC OPHTHALMIA.—Wecker (*Ann d'Oc.*, Nov.-Dec., 1882) has employed jequirity in a large number of cases of obstinate granular conjunctivitis, and draws the following conclusions:—1. Lotions of infusion of jequirity-seeds produce a purulent ophthalmia of a croupous nature, the intensity of which can be regulated by the number of lotions which are employed, and by the strength of the infusion employed. 2. The cornea runs no risk during the evolution of the jequiritic ophthalmia. In only a single case, in which the ophthalmia was pushed to a veritable diphtheritic aspect, was there produced a circumscribed and transient desquamation of the cornea. 3. The jequiritic ophthalmia rapidly cures the granulations, and, even if reproduced several times, it acts with much less danger and discomfort to the patient than inoculation, for it always disappears, without any treatment, by confining the patient for from eight to twelve days in a darkened room.—*New York Medical Journal.*

NEW OPERATION FOR SPINA BIFIDA.—The report of an unusually interesting operation is communicated by A. W. Mayo Robinson in the *British Medical Journal* (March 24). Being obliged to operate early in a child only six days old, the spina bifida being in the lumbar region, and the skin over the swelling being so thin as to threaten rupture, the skin was dissected off and the redundant membranes removed. The serous edges of the borders of the deep wound were brought together

by silk sutures, and over the sac was placed a portion of periosteum obtained from a living rabbit. The operation was successful in closing the opening and in saving the patient, but the bony tissue had not developed from the periosteum up to the time of reporting the case. The fibrous periosteum, however, doubtless strengthened the wall, and so prevented a return of the disorder.

TREATMENT OF STYES.—Louis Fitzpatrick, L. R. C.S., in the *Lancet*, says: The local application of tincture of iodine I have found, after many trials, to exert a well-marked influence in checking the growth of the sty. This is by far preferable to nitrate of silver, which makes an unsightly mark, and often fails in its object. The early use of iodine acts as a prompt abortive. To apply it the lids should be held apart by the thumb and index finger of the left hand (or a lid retractor, if such be at hand), while the iodine is painted over the inflamed papilla with a fine camel-hair pencil. The lids should not be allowed to come in contact until the part touched is dry. A few such applications in the twenty-four hours is sufficient, and I have never seen a single instance in which, after this treatment has been resorted to, the sty continued to develop itself.

RESORCINE AS A LOCAL APPLICATION TO CHANCRES.—In the January number of the *Annales de Gynecologie* MM. Leblanc and Fissiaux report six cases of soft chancre in women treated by the application of resorcline in powder or solution. The formula of the solution recommended is five grammes (75 grains) of resorcline to 20 grammes (5 oz.) of distilled water. The average duration of the six cases under this treatment was twenty-three days, whilst in five cases treated with iodoform the average duration was thirty-eight days. Resorcline is said to cause but slight pain, which usually disappears rapidly. The entire absence of odor gives this drug a great advantage over iodoform, to which indeed the authors consider it in all respects superior as a dressing for soft sores.—*British Medical Journal.*

RADICAL CURE OF INGUINAL HERNIA BY DISSECTION.—At the last meeting of the surgical section of the Academy of Medicine, Mr. William Stokes exhibited a patient whom he had operated on by this method for a strangulated inguinal hernia of the left side. The other side had been operated on in Liverpool some time since by the ordinary method, and had failed. Mr. Stokes dissected down to the pillars of the ring and stitched them and the peritoneum together with a piece of catgut. The operation was performed five months ago, and has turned out most successful. Mr. H. Gray Croly exhibited also on the same occasion a patient with inguinal hernia in which the same method was used with a similar result.—*Lancet.*

INCISION INTO AND DRAINAGE OF THE PERICARDIUM.—At the meeting of the Royal Medical and Chirurgical Society, on Tuesday evening last, Dr. Samuel West related a successful case of purulent pericarditis, treated by free incision and drainage. It is the first case which has been so treated in this country. The only other recent case on record is the one by Dr. Rosenstein, of Leiden, which was described in these pages two years ago. Dr. West's patient has fully recovered. There is no deformity of the chest, and nothing but a small scar remains to remind the patient of the narrow escape his life has had.—*Med. Times and Gazette.*

A NEW EDITION OF THE BRITISH PHARMACOPOEIA.—The General Medical Council have arranged for a new edition of the British Pharmacopœia, to be prepared under its direction by Profs. Redwood, Bentley, and Attfield, at a compensation of £800, this sum to include the cost of any experiments requiring to be made. The pharmacopœia committee recommend considerable changes in chemical nomenclature, in symbol notation, and in the method of representing the quantities of ingredients to be used in the preparation of medicines. They advise the addition of twenty-nine articles, and the omission of three.

SALICYLIC ACID IN RHEUMATISM AND TYPHOID FEVER.—In the course of a case of rheumatism in a child, related by Dr. J. P. Thomas, of Pembroke, Ky., in the *Louisville Med. News*, March 31, 1883, the author states that the following formula has proved to have so many advantages that he urges the profession to give it a trial :

R. Acid salicylic,	℥ ss.
Potass. acetat.,	℥ ij.
Syr. limonis,	℥ ij.
Aquæ aromatic.,	℥ iv.

M.—The usual dose for adults in rheumatism or typhoid fever, one tablespoonful every two or three hours, largely diluted with water.—*Med. and Surg. Reporter.*

FELINE TEST FOR DEFECTIVE SEWER PIPES.—Cats have a great fondness for the odor of valerian. So an ingenious Boston woman, suspecting some defective pipes, borrowed two cats and shut them up in the suspected room ; then, having purchased some oil of valerian, poured it into the highest basin in the house, and proceeded down stairs to watch the result. She was gratified to find both manifesting a preference for a certain spot in a closet near which a waste-pipe ran ; and here, on further inspection, a complete separation of the pipe was discovered.

THE TREATMENT OF OBSTINATE NEURALGIA.—M. Verneuil, in a communication to the Surgical

Society of Paris (*Le Prog. Med.*, No. 49, 1882), referring to the surgical treatment of obstinate neuralgia, said that all therapeutic resources should be exhausted before surgical interference was undertaken. He recalled a case which was cured by hyoscyamin, after resection of all the ends of nerves and even amputation had failed to give relief.—*Med. Record.*

It is said of a talented (?) physician of Cincinnati that the only trouble he ever experienced in the introduction of the catheter in the female was that it was so apt to hitch against the prostate gland. He is inventing an instrument to overcome the difficulty. This is only equalled by the medical man in England who advertised a book on disease of the prostate gland in both sexes.

AN ANTIDOTE FOR PILOCARPIN.—Dr. Frommuller, of St. Petersburg, states that the symptoms of poisoning produced by the injection of gr. $\frac{1}{2}$ of hydrochlorate of pilocarpin, disappeared within two minutes after the injection of gr. $\frac{1}{2}$ of hydrochlorate of homatropin, the pulse, which had previously been at 120, falling to 80. This is not an isolated case.

FOTHERGILL'S COUGH MIXTURE.—Dr. J. Milner Fothergill, of London, considers the following a most elegant and palatable cough mixture :

R. Syr. Scillæ.....	℥i
Acid. Hydrobrom. dil.....	
Spts. Chloroformi aa.....	℥ss
Aquæ.....	℥j—M.

CITRIC ACID IN FROST-BITE.—Lapatin, a Russian surgeon, who has had considerable experience in the treatment of frost-bites among the troops in the last Turkish war, says that a mixture of equal parts of dilute citric acid and peppermint-water is an effectual cure for frost-bite.

TREATMENT OF STYES.—For hordeolum Dr. David Webster has used calcium sulphide, a granule (gr. $\frac{1}{10}$ each) each hour until ten have been taken, repeated daily, with marked benefit.—*Archives of Medicine*, February.

BACTERIA are best destroyed by a solution of bichloride of mercury (1 part in 10,000). This has been used successfully as an injection in gonorrhœa.

"Alcohol," said the professor, "has killed more people than yellow fever." "That is true," said the somewhat bibulous student ; "but that is only because more have taken it."

DR. DRINK, the author of the surgeon's "*Vade Mecum*," died on the 15th ult., at the age of 68 years.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grande Batelière, Paris.

TORONTO, JULY, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

PRESCRIBING BY ROTE.

Dr. Lionel Beale, in his very excellent little volume "On Slight Ailments," laments the falling off among the younger generation of practitioners in the art of prescribing. "I have often heard the remark," he says, "that our predecessors knew more about the treatment of disease than we of this generation do. There is some truth in this; and I am sure that many old practitioners now living are more successful in relieving the aches and pains of their patients than some of the young ones, who may, nevertheless, have a far more intimate knowledge of the diagnosis of obscure forms of disease and of the minute pathological changes which have damaged tissues and organs." Every observant medical man must frequently have had the opportunity, either in his own case when commencing practice, or in that of his younger brethren, of verifying the correctness of Dr. Beale's remarks. Those holding positions on the teaching staffs of our medical schools will more particularly have had occasion to note this. It is not that there is any general decrease among students in abstract knowledge of the principles of therapeutics or of the action, doses and incompatibilities of medicines. But there does seem to be an inability to apply those principles to the practical treatment of disease in its varied forms.

With reference to the cause of this deterioration which Dr. Beale bewails, we would remark that it is certainly not the teaching that is at fault, for we know that the tendency of the age is to make this as thorough and as practical as possible. It is

not, we believe, any failure of application on the part of the students, for we are assured that the standard of the classes is steadily rising year by year. We think Dr. Beale himself, though all unconsciously, gives us a clue to the source of the mischief. A few lines below the passage just quoted, he tells his class that "it will be well for them to take notes of prescriptions." Now, as a matter of fact, this is the very thing that is overdone. We are very far from deprecating the practice of taking notes. Nothing tends so much to concentrate the student's attention, to arouse his interest, to form his mind and to impress important facts indelibly upon his memory, as judicious note-taking during his attendance upon didactic and clinical courses. But there are two ways of taking notes, as there are of doing everything else, and we are disposed to believe that to the practice of indiscriminately cramming a note-book with formulæ, is to be traced much of the inaptitude for extemporaneous prescribing that many newly graduated practitioners find such a serious stumbling-block in the path of their profession. Among a certain class of students—by no means a small one—there seems to be a race who shall amass the largest collection of prescriptions. It is the same story in the lecture-room, the dispensary and the hospital clinic. Every lecturer on medical subjects must have remarked, with more or less amusement, that in order to galvanize into life a sleepy and inattentive class, nothing is so effectual as the judicious interpolation of an occasional prescription. No sooner is the cabalistic R written on the blackboard, than there is a general stirring up of the dry bones; the sleepy become alert, the inattentive interested; note-books and scraps of paper are drawn from their recesses, and down goes the formula, to be preserved intact and inviolable as the laws of the Medes and Persians "for future reference." The same thing occurs at the indoor clinic, while the dispensary prescription book is ransacked by the unfortunate victims of this *prescriptionum sacra fames*.

Now all this would be well enough did it go no further; but unfortunately the prescription collector is apt to place too much dependence upon his collection for the future treatment of his prospective patients. His collection book is his sheet anchor; without it he is lost; with it he is prepared to cope with every disease known to science

—by name. This is not as it should be. It would be as reasonable for a student to expect to become a skilled geometrician by getting up his Euclid "by heart," as to hope to become a successful practitioner by blindly relying upon stereotyped formulæ. It is destructive of all self-reliance; it is fatal to anything like an intelligent appreciation of the value of symptomatology; in means, in how many cases, material death to the patient and moral dissolution to the practitioner. The blind worshipper of the fetish of formula has his own pet prescription for every malady under the sun. He has been aptly likened to an unskilful archer with a quiverful of arrows which he does not know how to use; he draws his bow at a venture, and if the shaft chance to hit the mark, it is as much by good fortune as anything else. It matters not to him what are the conditions of the case. He prescribes for the name of the disease, not the symptoms. He is like Shakespeare's courtier in his narrow-mindedness,—

"Telling me the sovereign'st thing on earth
"Was parmaceti for an inward bruise."

Of course this state of things cannot last for ever. The young practitioner, if he possess a molecule of sense, soon perceives that if he would achieve success he must do something more than treat the mere name of the disease. But by the time he has reached this sage conclusion the question arises, how much damage has he done—to his own reputation no less than to his patients' health. How much disappointment and humiliation might he not have spared himself, had he, during his student days, devoted less time to the acquisition of prescripional formulæ, and more to the study of the *rationale* of therapeutics, of the adaptation of certain remedies to certain conditions, apart from the mere nomenclature of disease, and of the harmonious blending of drugs into safe and efficient combinations, wherein every symptom is considered and every individual item has its *raison d'être*. We hear a good deal now-a-days about practical work in the medical schools. Its importance as a factor in professional training is now generally recognized, more especially in connection with the clinical study of disease. It is not too much to hope that its sister art, that of prescriptions and prescribing, will soon receive the recognition it deserves. The two should go hand-in-hand, intelligent recognition with intelligent treatment of the ever-varying forms of disease.

ONTARIO MEDICAL COUNCIL.

The meeting of the Ontario Medical Council, the report of which will be found in another column, was this year unusually brief, yet some important matters were under discussion, and duly considered, both in council and committee. In the election of President, the Council did an act of justice to the Homœopathic members for which they are to be commended, for so long as these gentlemen are associated in the carrying out of the act for the general good, they should not be debarred by reason of any difference of opinion as to practice, from the honors the Council has at its disposal. Dr. Logan is a worthy representative of the Homœopathic body, and we feel assured will do credit to the position to which he has been unanimously elected by his confrères. We are also very much pleased to observe the wise discretion exercised by the Council in refraining from making any radical changes in the curriculum, until they are seen to be imperative. We well remember in times past, the frequent and annoying changes in the curriculum from year to year, until the announcement was so complicated that no one understood it, and students were never sure what the next turn of the kaleidoscope might reveal. In consequence many of them gave up in despair and went abroad to seek in another way the necessary qualification to enable them to practise in Ontario. Instead of making any hastily considered changes, a committee was appointed to carefully consider the changes (if any) imperatively required, and report at the next meeting of the Council. Much as we would have liked to have had attendance upon a "summer session" made compulsory, we think the Council acted wisely in carefully considering the matter before putting any additional burden upon the students. The proposal, also, to return to the system of annual examinations, once more received its quietus, and we trust it will not again be brought forward. The division of the examinations into primary and final is found in practice to work well and is a sufficient guarantee both to the profession and the public. We trust therefore that no change in this direction will be entertained by the Council.

With reference to the regulation suggested by Dr. Edwards in regard to "case-taking," which proposes that a case in medicine and another in

surgery shall be written out in detail and sent to the examiner by candidates for the licence, we consider it too cumbersome and of little practical value. The proposed regulation is somewhat similar to that which requires all candidates for the degree of doctor of medicine to write a thesis, a requirement which is now being discontinued by most universities. All such evidences of qualification are worthless, for the simple reason that they are for the most part copied from books, and even in some cases written for the candidates by proxy, and so would it be in reference to "case-taking." A much better guarantee of experience in clinical work would be to exact from each candidate for the final examination a certificate, duly signed, of having acted as clinical clerk and surgical dresser in some general hospital for a period of not less than three months.

The subject of appointing a public prosecutor by the Council was again up for discussion, but the proposal was not entertained. The appointment of a public prosecutor, much as it would gratify many members of the college, would involve the Council in considerable trouble and entail an expense which, it is needless to say, it is not at present in a position to incur. Besides, it is useless to endeavor to purge the community of unlicensed quacks, while licensed quacks—members of the college—are permitted, from want of proper legislation, to prostitute their high calling, for filthy lucre and for the benefit of a set of impudent peddling Yankee charlatans. A committee was appointed to draft amendments to the Medical Act, and we trust a clause will be inserted which will in some measure put a stop to these disgraceful proceedings on the part of those hirelings, who are, by their mean and mercenary actions, bringing into disgrace an honorable profession.

AMERICAN MEDICAL ASSOCIATION.

The thirty-fourth annual meeting of the American Medical Association was held at Cleveland, O., on the 5th, 6th, 7th and 8th ult. The President, John L. Atlee, M.D., of Lancaster, Pa., occupied the chair. Three Canadian members of the profession, viz., Drs. Osler and Roddick, of Montreal, and Dr. Harrison, of Selkirk, were present and were invited to seats on the platform. Considerable interest was

manifested with reference to the subject of the Code of Medical Ethics, especially concerning consultation with homœopaths; but few were prepared for what actually took place. We are told that it was "evident that the feeling in favor of retaining intact the time-honored code of the Association was so universal, that it was useless to discuss the subject, and the strength of this feeling was indicated by the dignified silence which was almost universally maintained with regard to it." The truth of the matter is, that every delegate, before registering, was required to sign a blank form of acknowledgment of his adhesion to the Association's code. This amply accounts for the "dignified silence"; but we believe this attempt at coercion on the part of the Association will be followed by a reaction, which will have the direct opposite effect of what was intended. We are not prepared to subscribe to the wisdom of the Association's decision on this question, for, to our mind, it savors too much of that ill-advised, petty persecution which in all cases fails to suppress the persecuted, and in many actually contributes to their ultimate success. This has, as a matter of fact, been the case with the followers of Hahnemann, who owe not a little of their progress to the ill-judged, hostile attentions of the regular school. Quiet indifference would have been by far the better policy.

In regard to the proceedings of the Association, many interesting and valuable papers were read on a variety of subjects in the various sections, and were discussed with vigor and earnestness and with a view to their practical bearing. Dr. J. H. Hollister, of Illinois, delivered the address on Medicine; Dr. J. K. Bartlett, of Wisconsin, that on Obstetrics; and Dr. W. F. Peck, of Davenport, Ia., that on Surgery. The report of the committee on the proposed journal was adopted without much discussion, the general feeling being apparently in favor, at all events, of a year's trial of the new plan. Over two thousand pledged subscriptions have been obtained, indicating an annual revenue of \$12,500. Dr. N. S. Davis, of Chicago, will be the editor. Dr. Austin Flint, sr., of New York, was chosen President of the Association; and Washington was selected as the next place of meeting, on the first Tuesday in May, 1884.

ONTARIO MEDICAL ASSOCIATION.

The meeting of the above association was held in Toronto on the 6th and 7th ult. and was well attended. The very limited time, viz.: two days, was hardly sufficient to enable the association to get through with the rather large number of papers presented. The result was an undue haste in some cases, where a little more time and attention should have been bestowed. Some papers of ordinary merit occupied much longer time in reading than was intended, while others of superior merit were either postponed beyond their order of precedence, or crowded out altogether. Some of the members also who brought patients with them, received scant attention, and in one instance the case was hurried through with almost indecent haste, and, although wholly unintentional, the gentleman presenting the patient received very little consideration for his kindness. As a rule too little time was allowed for discussion, and only a few seemed desirous of availing themselves of the small opportunity offered. One or two incidents occurred which it is scarcely worth while to refer to, except to avoid a repetition of them at some future meeting. We allude to the absence of the usual courtesy shown to the retiring president and ex-president, and in this case we might almost say, the founders of the association, in not inviting them to seats on the platform, or nominating either of them to the chair in the absence of the president. Of course we cannot but think, nay we feel assured, that this was purely an oversight; but it was none the less chilling. When it was announced that the association had decided to meet next year in Hamilton, some one remarked that he thought it should go east and learn a little of that *suaviter in modo* which is so characteristic of our confrères in the sister province of Quebec.

It was a source of regret to all that the president (Dr. Macdonald, of Hamilton) was prevented through illness from presiding during the first day of the meeting, and on the afternoon of the second day he was obliged to leave the chair before the close of the meeting, in order to take the train for Quebec, where he sailed for a holiday trip to Europe. He carries with him the best wishes of the Association for his future welfare and happiness.

INSTANTANEOUS LIGHT.—The *Boston Transcript* of Dec. 30, describes a unique apparatus manufac-

tured by the Portable Electric Light Co., 22 Water Street, Boston. It occupies the space of only five square inches and weighs but five pounds, and can be carried with ease. The light, or more properly lighter, requires no extra power, wires or connections, and is so constructed that any part can be replaced at small cost. The chemicals are placed in a glass retort; a carbon and zinc apparatus, with a spiral platinum attachment, is then adjusted so as to form a battery, and the light is ready. The pressure on a little knob produces an electric current by which the spiral of platinum is heated to incandescence. The usefulness of the apparatus and the low price (\$5) will no doubt result in its general adoption. Some of the prominent business men of the State are identified with this enterprise. In addition to its use as a lighter the apparatus can also be used in connection with a burglar alarm and galvanic battery.

RHEUMATIC ENDOCARDITIS.—Dr. MacLagan complains in the *British Medical Journal* that his treatment of this disease by moderately large and frequently repeated doses of salicin has not received a fair trial, and that therefore those who denounce his method as a failure do so unjustly. He insists that the alkaloid—not the salicylate—should be given in doses of from 20 to 40 grains every hour for six hours, or until pain is relieved (which it generally is within that time), and that the same dose should then be given every hour till the pain is gone and the temperature falls to the normal, which usually happens within 24 hours. He gives the preference to salicin, not because he regards it as superior to the salicylate of soda as an anti-rheumatic, but because it may be given in large and frequent doses without causing such disturbance of the system as not unfrequently follows the use of the salicylate and necessitates its suspension.

ENLARGED BRONCHIAL GLANDS.—Prof. Wm. Pepper presented a case at one of his clinics, at the University Hospital, of enlargement of the lymphatic glands surrounding the right bronchus. The symptoms were dullness on percussion, diminished bronchial respiratory murmur on auscultation, pain over the region when the patient was in the recumbent posture, and a scrofulous diathesis. Heart sounds were normal, and the lungs

were healthy. Prof. Pepper prescribed blisters on the back over the seat of the trouble, and the following prescription to be taken internally :

R. Hydrarg perchlor gr. j ;
Chlor. ferri gr. ij ;
Glycerini 3vj.

Sig.—A teaspoonful diluted with water three times a day after meals.

PERSISTENT HICCUGH.—The following are some of the remedies recommended by correspondents in a recent number of the *Lancet* for the relief of singultus: Hypodermic injection of morphia; laudanum and chloroform rubbed in along the course of the phrenic nerve; spinal ice-bag; hot compresses to the spine; ten minims of tincture of opium every four hours; hyoscyamine, arseniate of strychnine aa $\frac{1}{8}$ gr, bromhydrate of cicutine $\frac{1}{2}$ gr. every half hour until relieved; ether sulph., vin. ipecac., tr. digitalis, aa 3ss., magnesia sulph. 3ij., chloroform water to six ounces—two table-spoonfuls every four hours; infusion of mustard seed; inhalation of chloroform, ether, or amyl nitrite.

BRITISH MEDICAL ASSOCIATION.—The fifty-first annual meeting of the British Medical Association is to be held in Liverpool on July 31st and three following days, under the presidency of Dr. A. T. H. Waters. The address in Surgery will be delivered by Reginald Harrison, F.R.C.S.; and the address in Pathology by Dr. C. Creighton.

The general secretary, in the *Brit. Med. Jour.* of May 26, gives the following as the strength of the Association:—30 branches, with a membership of 6,275 and an unattached membership of 3,141, including 199 foreign and colonial members, giving a grand total of 7,416 members. This constitutes the most widely diffused and powerful medical organization in the world.

REMOVALS.—Dr. Sharp, of Woodstock, N. B., has removed to Minneapolis, Minn. The following resolution respecting his removal was passed by the Carleton Medical Association:

Resolved,—That the President and members of the Carleton County Medical Society have heard with much regret of the intended removal of Dr. Sharp from Woodstock, and desire to express to him the high esteem which they have always felt for him, both as a man, a fellow practitioner and a member of this society. Wishing him and his family a happy God's speed, they would fain hope that wherever in

future his lot may be cast, his skill as a physician, and his character as a gentleman, may meet with that full appreciation which they deserve, and which they always have met with in this community.

Dr. Sprague, of Hartland, has removed to Woodstock, N.B. Dr. Rollins, of Crediton, has removed to Exeter, Ont., and Dr. Nasimith from Dashwood to Crediton.

WEATHER AND SKIN DISEASE.—Dr. Stelwagon, of Philadelphia, in an analysis of 2,000 consecutive cases of skin disease, of which a detailed report appears in the *Philad. Med. Times*, points out that skin diseases are much commonest in the spring season—March, April and May, the preponderance being in the order named. He says the explanation of this may be found in the fact that at this season of the year, especially during March and April, the weather is apt to be damp and windy, with sudden changes of temperature. He thinks, moreover, that the skin, having been subjected to the prolonged cold of winter, is weakened, and therefore more susceptible to disease.

CANADIANS ABROAD.—Drs. J. A. Hunter and E. G. Knill, Ontario; and T. Bairston, Halifax, have passed their final examinations and been admitted members (double qualification) of the Royal College of Physicians and Surgeons, Edin., and Dr. C. A. S. Gordon has passed the primary in the same institution.

Drs. Reuben Levi (McGill), and H. Mickle (Toronto), have passed the Royal College of Surgeons, Eng., and received the diploma, and Dr. R. J. Bliss Howard (McGill), has passed the primary examination for the Fellowship of the Royal College of Surgeons, Eng.

David Tullock, M.B., C.M., of Winnipeg, Man., has received the degree of M.D. from the University of Aberdeen.

POISONING BY CHLORATE OF POTASH.—An assistant-surgeon, U.S.A., writes to the *Med. News* that he has repeatedly observed injurious effects resulting from the excessive use of chlorate of potash, more especially in cases of diphtheria. In one instance, in which a fatal termination took place, the patient seemed to be gaining rapidly until the stomach gave out, and in spite of every effort to control the irritability, vomiting persisted until death, which occurred 26 hours after this symptom set in. He believes the drug destroyed

the tone of the stomach and poisoned the whole system of the patient.

CRESKIT EUNDO.—The British Pharmacopœia Committee recommend the addition to the promised new issue of 29 articles and the omission of three. The German committee, on the other hand, recommend the excision from their armamentarium of a huge catalogue of preparations and the adoption of a comparatively small number of new remedies. One would have thought that this was the kind of treatment best adapted to our Pharmacopœia. If we go on at the present rate there is great danger of its becoming as unwieldy as the German volume; as it is, there are, we might almost say, scores of preparations in its pages which are not used once in a lifetime.

DEATH FROM MALE FERN.—A case of poisoning from an overdose of the ethereal extract of male fern recently occurred in the practice of Dr. Coghill, of Ceylon. The quantity given was *one ounce and a half*—half to be taken at bed time and the other half the following morning. Purging, vomiting and cramps came on, followed by symptoms of collapse, and the patient died 12 hours after taking the second dose. Dr. Coghill was misled by an error in "Naphey's Medical Therapeutics," where *ounce* is printed instead of *drachm* as the dose of this remedy.

A PLEASANT BEVERAGE.—Acidulated drinks are refreshing, especially in warm weather, but the constant use of lemons or limejuice is apt to interfere with the regular action of the bowels. Horsford's Acid Phosphate, with water and sugar, makes a delicious beverage, which allays the thirst, aids digestion and benefits the whole system. It also relieves the exhaustion following excessive mental or physical labor. Many prominent physicians have used it in their practice, and give it their unqualified approval.

THE ANTI-VACCINATION MOVEMENT.—The anti-vaccinationists do not seem to be making much progress in England, if one may be allowed to judge by their latest "moral victory." On the 19th ult., a motion by Mr. Taylor, member for Leicester, against compulsory vaccination, was defeated in the House of Commons by a vote of 286 to 16. The anti-vaccinationists, however, will probably

find consolation in the fact that the citizens of Basle, Switzerland, have voted by about five to one in favor of the abolition of compulsory vaccination.

MEDICAL COLLEGE FOR WOMEN.—Our respected contemporary the *Canada Medical and Surgical Journal*, in commenting on our remarks anent the woman's college, falls into an error in stating that it "is controlled by members of the faculty of the Trinity School of Medicine." For the information of our contemporary and others, we would say that not a single member of the Trinity staff has any connection with the female medical college.

MEDICAL EDUCATION FOR WOMEN.—It is announced that the Kingston Female Medical School has secured guaranteed subscriptions amounting to \$1200 per annum for five years, and that only \$300 more is wanted to complete the sum required. What about the Toronto Female School? McGill College, Montreal, is about to open its classes to women, so that female medical students in Canada will be amply provided with facilities for pursuing their studies.

INJECTION BROU FOR GONORRHEA.—The following is the composition of injection Brou, a well-known proprietary medicine for the treatment of gonorrhœa:

Sulphate of zinc.....	100 parts.
Acetate of lead.....	200 "
Tinc. catechu.	400 "
Wine of opium.....	400 "
Water.....	19,000 "

LEMONADE IRON.—The following will be found a most pleasant mode of administering iron to fastidious patients. The credit of it is due to Dr. Goodell, of Philadelphia:

R. Tr. Ferri Chlor.....	3i.
Acid Phosph. dil.....	3vi.
Spts. Limonis	3i.
Syrup ad.....	3vi.—M.

Sig.—A dessertspoonful in water after meals.

INVERSION OF THE UTERUS.—Dr. Clifton E. Wing, of Boston, read an interesting paper (*Boston Med. & Surg. Journal*) before a meeting of the Suffolk District Medical Society, on the treatment of Inversion of the Uterus. He recommends continued gentle pressure properly applied to the in-

verted organ. This is to be accomplished by some form of vaginal stem repositor held in place, and the pressure kept up by elastic bandages.

MONTREAL HOMŒOPATHIC MEDICAL COLLEGE.

—The following are the names of the Faculty of the newly organized Homœopathic Medical College: Dr. Wanless, *President*, Medicine; Dr. Muller, *Registrar*, Obstetrics; Dr. Nichol, *Materia Medica* and Medical Jurisprudence; Dr. McLaren, Physiology; Dr. J. H. Fulton, Surgery.

APPOINTMENTS.—Dr. Fenwick, of London, has been appointed the representative of the Western University in the Ontario Medical Council, not Dr. Arnott, as stated in our last issue.

Dr. W. Stephen has been appointed physician to the Montreal Dispensary.

George W. Nelson, M.D. (Bishop's College Prizeman), Marbleton, Que., brother of Wolfred Nelson, M.D., of Panama, has been appointed Resident Surgeon of the Universal Inter-oceanic Canal Co.'s Hospital, Panama.

Dr. Augustus Jukes, of Regina, has been appointed Registrar of the districts of Touchwood, Regina and Souris, N.W.T.

Dr. T. A. Rodger, of Montreal, has been appointed surgeon to the Grand Trunk Railway, *vice* Dr. Scott deceased. This appointment is one we feel assured will give satisfaction both to the profession and the employes of the Company.

Prof. Robert Bartholow has been elected Dean of Jefferson Medical College, *vice* Prof. Elderslie Wallace, resigned in consequence of ill-health.

Dr. J. Corlis of St. Thomas, Ont., has been appointed Assistant Surgeon to the "Elgin" Battalion.

Dr. A. McDonald has been appointed on the acting staff of the Toronto General Hospital.

VICTORIA AND LAVAL.—The supporters of Victoria Medical School, Montreal—which is making a brave stand against the efforts of Laval University, backed by the Pope, to suppress it—evidently believe that Heaven helps those who help themselves. A member of the faculty, who modestly withholds his name, has contributed ten thousand dollars towards carrying on the fight.

ARCADES AMBO.—The *Medical Age* says: "We have a physician (?) right here in Detroit who avers

that angina pectoris is an excellent remedy in consumption." He must be a brother of the Toronto reporter who made a member of the Ontario Medical Association say that phymosis was an excellent remedy for chorea.

At a recent sale at auction of old government medical supplies, at St. Louis, amongst other things one man bought 17,308 pills for thirty-eight cents. A local paper says: "The books and instruments sold had been used before, but the pills were entirely new."

SUMMER SESSIONS.—The summer sessions inaugurated this year at the two medical schools in this city have been very successful. Sixty-two students are attending the clinical instruction at the Hospital.

F.R.C.S.—Dr. Robert Barnes has been elected a Fellow of the Royal College of Surgeons, Eng., his diploma of membership bearing date May 8, 1862.

PARLIAMENTARY.—We are glad to observe that our respected and worthy confrère Dr. Gaboury, of St. Martin, has been elected member of the Local Legislature for Laval Co., Que.

THE Massachusetts Medical Society has declined, by a vote of 62 to 58, to admit women to membership.

Books and Pamphlets.

THE PRACTITIONER'S READY REFERENCE BOOK. A Handy Guide in Office and Bedside Practice. By Richard J. Dunglison, A.M., M.D. Third edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston, Son & Co. Toronto: Willing & Williamson.

The fact that this work has passed through three editions in the comparatively brief space of six years would argue for it a wide and steadily maintained popularity. That it can be accepted as a criterion of the intrinsic value of the volume is more open to question. Taking into consideration that nearly one-fourth of the book is devoted to such points as dosage, incompatibles, prescriptions, and a bare synopsis of the treatment of diseases, the inference is permissible that on these subjects,

which every practitioner is supposed to have at his fingers' ends, Dr. Dunglison's readers and patrons are somewhat weak-kneed. For this, however, the author can in no wise be held responsible; his business is to grasp the condition of the market, and to cater to the existing demand; and, accepting as a fact the inferential view just propounded, he has done so successfully. Within the limits of some five hundred pages he has collected a mass of facts, figures and hints relating to every branch of the physician's and surgeon's art, and which, owing to their being widely scattered through various professional treatises, are not always easy of access to the busy practitioner. To the younger members of the profession, especially those who are just embarking in practice, the book is likely to be particularly serviceable; while older men, who have grown somewhat rusty in the minutiae of the teaching of the schools, will frequently find a consultation of its pages beneficial. We are inclined to think that somewhat more than its share of space has been assigned to *materia medica*, while other and equally important subjects have not received the full recognition they deserve. This, however, is easily remedied, and as each successive edition of the work has contained numerous additions, it will doubtless be attended to in the future. The value of the section on "Selected Prescriptions" would be materially enhanced were the source from which each formula was drawn appended thereto. Among the more valuable features of the work, to our mind, are the tables of the solubility of drugs in various menstrua, doses for hypodermic and other injections, for atomized fluids for inhalation, gargles, collyria, suppositories and enemata, many of which are not to be found in the pharmacopœias; also the hints for the use of galvanic batteries, and the selection and application of trusses—simple things in themselves, but which it is not every medical student's fortune to become familiar with during his apprenticeship. The dietetic preparations for the sick will also be found extremely valuable. The section on "How to prepare stained sections of animal tissues" (read before the Quekett Microscopical Club in 1879) seems to be somewhat out of place in a work of this kind; moreover the pathologist who endeavors to keep pace with the times will be apt to find the directions it gives somewhat old-fashioned. Upon the whole, however, the author has conscientiously

carried out the object he had in view, and has succeeded in producing a work of much value to the younger members of the profession.

A MANUAL OF AUSCULTATION AND PERCUSSION; embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism, by Austin Flint, M.D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Third edition, revised. Philadelphia: Henry C. Lea's Son & Co., 1883.

We heartily welcome the third edition of the work of this well-known teacher and writer. The book requires no comment at our hands, a mere mention being all that is necessary. It will be found without a rival on the subject upon which it treats.

ON CERTAIN PARASITES IN THE BLOOD OF THE FROG. By Wm. Osler, M.D., M.R.C.P., Lond., McGill College, Montreal.

ON CANADIAN FRESH-WATER POLYZOA. By the same author.

Both the above are reprinted from the *Canadian Naturalist*.

Births, Marriages and Deaths.

On the 6th ult., Constantine O'Gorman, M.D., of Hastings, to Eleanor, second daughter of A. McLean, Esq., of Walkerton, Ont.

On the 14th ult., Frederick LeM. Grasett, M.D., F.R.C.S. Edin., of Toronto, to Jane Stewart, second daughter of A. Thornton Todd, Esq.

On the 21st ult., G. H. Cowan, M.B., M.R.C.S. Eng., of Napanee, to Ida Alberta, eldest daughter of the late John Percy, Esq., Ernestown, Ont.

On the 20th of May, Dr. J. A. Sivewright, of New Westminster, B. C., aged 33 years.

On the 4th ult., Wm. Ruddick, M.D., of St. Martins, N. B., in the 67th year of his age.

At Québec, on the 19th ult., Dr. E. Rosseau, aged 76 years.

* * * The charge for notices of Births, Marriages and Deaths is Fifty Cents, which should be forwarded in postage stamps with the communication.

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Original Communications.

PASTEUR ON THE ATTENUATION OF VIRUSES.*

TRANSLATED BY C. W. COVERNTON, M.D., M.R.C.S.,
TORONTO.

(Continued from page 325.)

I have now to deal with a new virus met for the first time under the following conditions : The year 1881 was remarkable at Paris for a very serious epizootic, that kind of affection known under the name of typhoid fever of horses ; an omnibus company of Paris lost more than 1500 horses. We have commenced some researches on this disease which—unfortunately for our experiments—did not reappear in 1882. In inoculating rabbits with the frothy matter escaping from the nostrils at the moment of the death of the horse suffering from the affection in question, the rabbits died and their blood presented a new microbe in the form of the figure 8 with a lengthened intersection. This microbe communicates to the rabbits a veritable typhoid fever which kills them in less than twenty-four hours ; the lungs are generally hepatized, with pleurisy, Peyer's patches are tumefied, sometimes of a raspberry red and hemorrhagic. The fold of the ileo-colic valve is always very much swollen and more often hemorrhagic than those of the intestine ; the kidneys sometimes hemorrhagic ; the liver often a little pale. The animal falls rapidly into a pronounced comatose state ; after four hours inoculation, the fever is evidenced by more than one degree C. of elevation of temperature, even when death happens only after thirty-six hours ; peritonitis is also a frequent concomitant. The attenuation of this microbe takes place when cultures in

broth are exposed to the contact of the air ; but it is difficult to seize, because the period during which it displays itself is followed almost immediately by the death of the microbe. In other words if a culture of this microbe is made and abandoned to the contact of the air, in trying each day its virulence, this is shown to be always mortal for the rabbits until all of a sudden the culture is found dead, that is to say no longer capable of being cultivated and without any action upon animals. In cultures in contact with air the culture passes from virulence to death in from fifteen to thirty days if it is left at a temperature of 35° Cent. On the contrary developed at 35° and left at the temperature of the ambient air, the cultures were preserved six or eight months. *In vacuo* the cultures are preserved virulent for at least a year, whether at the stove or at ordinary temperature. For success in seizing and fixing attenuation, we have had recourse to the following artifice which will call to mind that which we have recently described for demonstrating that it is truly to the oxygen of the air that is due the attenuation of the microbe of charbon at 43° Cent. A culture was made by aid of the virulent blood of a dead rabbit, and it was left to itself ; each day a new flask of broth was seeded so as to have as many cultures as days of rest of the first mother culture. A time arrives when the seeding of this mother culture shows itself to be sterile ; arrived at this point we take as mother culture of a new series of daily cultures, the culture made on the eve of the death of the first mother culture. The second mother culture dies in its turn : then we remake a new series of daily cultures by taking for the mother culture the second culture of the eve of the death of the second mother culture, and so on progressively. By this method we finish by procuring cultures which do not occasion the death of the rabbits, but are limited to the occasioning of curable abscesses, the development of which is sometimes enormous. At this time it is easy to pronounce that we now have to do with vaccinal viruses, that is to say, that the convalescent rabbits will now bear without injury the most virulent cultures of the microscopic organism of the typhoid fever of rabbits. The vaccinal cultures made at short intervals preserve their vaccinal virulence. The proof of the influence of the oxygen of the air in the attenuation is again furnished by the cultures ;

*Delivered before the Ontario Medical Association at Toronto, June, 1883.

in vacuo, or protected from the influence of the air, they preserve their virulence and only die after a very long time, manifesting that virulence up to the death of the culture. To resume, it cannot be doubted that we possess a general method of attenuation, the application of which should only be modified according to the exigencies of the physiological peculiarities of different microbes. The general principles have been discovered, and we cannot withhold our belief that in the future this order of research will be full of hope; but however splendid the demonstrated truth may be, it does not always enjoy the privilege of being readily accepted. I have met in France and elsewhere obstinate opponents. Allow me to choose among them one whose personal merit has the greatest right to our attention; I mean Dr. Koch, of Berlin. There appeared at Berlin a year ago, the paper entitled "Collection of the Works of the German Sanitary Office." My labors are there attacked with a strange vehemence by Dr. Koch and his pupils. Truly surprising things are to be found in certain papers in this collection; it is in divers places insinuated that M. Pasteur does not know how to cultivate microbes up to a state of purity, that he cannot know whether his works are exempt from causes of error, because he is ignorant of the manner of recognising micro-organisms, that he has deluded a school of medicine to publish "incredible facts" as to cultures. It is there stated that the method employed by me for inoculation consists in injecting under the skin one or several syringes full of liquid, that I have never had on hand pure septicæmia without a complication of other diseases, that I have incorrectly applied the word septicæmia, that he (M. Koch) approaches much nearer to the truth in calling it malignant œdema, that M. Pasteur does not know how to recognize the septic vibrio though he may have discovered it. In the experiments of charbon communicated to fowls by the sole fact of lowering their temperature after inoculation, Dr. Koch, who finds nothing remarkable in this experiment, asks whether the fowls under the lower temperature who became inoculated with charbon, were not capable of taking it naturally, because, said he, a German author in inoculating fowls with charbon obtained eleven times in thirty-one positive results. That is an assertion that Dr. Koch would have done well to have refrained from mak-

ing before establishing objections against the truth of very exact observations. The pupils of Dr. Koch have outdone their master; we find, for example, in their papers, that the only certain guarantee of the purity of the cultures is incessant control by medium of a microscope, which is impossible with Pasteur's cultures. Another stronger passage concerning the attenuation of viruses. It is M. Lœffler who speaks: "When in the experiments of Gaffky, the cultures have presented an uncertain action, an attenuation of the virus, there existed always an adulteration by very analogous organs of rapid growth, but not pathogenic." M. Lœffler is, nevertheless, more indulgent than his master and than his colleague, M. Gaffky; he does me the honour of saying that he is disposed to believe that my cultures were pure, but do we know? In the mind of the writer that which might have led me into error is that the adulteration of my cultures commenced with the vaccination. "The air of a laboratory," said he, "devoted for long years to investigations for bacteria, is full of an enormous mass of germs; is it not possible that a germ may have become placed on the vaccinating needle, the more probably so that he had occasion frequently to try the virulence of the cultures? It is this which would have made me admit the attenuation of the virus of fowl cholera." This is not all, when I think I have in my hands fowls vaccinated, the writer imagines that I could have taken for such fowls, fowls which were simply non-receptive of fowl cholera. Finally, the writer does not believe that I have operated, as I have stated, on 80 fowls in some of my experiments, because that would have involved an expenditure of too much money. It is true, that to establish the great fact of the attenuation of virus, the State has permitted me to have been regardless of cost. Perhaps in this assembly some persons may entertain the opinions of my opponents; I beg to invite them now to state their objections, I shall be happy to enlighten them.

M. Koch, of Berlin, ascended the platform, and in German made the following brief remarks, which were thus immediately rendered into French by M. Hultenhoff: "Having learnt by the programme of the Congress that M. Pasteur would speak to-day on the attenuation of virus, I have repaired to the sitting in the hope of learning some new facts on a subject which interests me in a high degree.

I must confess that I have been disappointed in this expectation, and that there is not in the communication of M. Pasteur anything that is new. I do not consider it necessary to reply here to the attacks of M. Pasteur for two reasons—first, because the points in dispute enter only indirectly into the domain of hygiene properly so called; and, secondly, not being sufficiently versed in the French language, and M. Pasteur not sufficiently in the German, we could not here engage in a profitable discussion. I reserve my reply to M. Pasteur for the columns of the medical journals.”

M. Pasteur replied to M. Koch that if he had been able to follow the lecture he had just delivered, he must have been convinced that new facts have to-day been demonstrated; that he would tranquilly await the reply of M. Koch, and reserve the right also of replying if there were need for so doing.

M. Sormani, of Pavia, said that the discoveries of M. Pasteur had filled the scientific world with his renown, and had opened new fields for study and observation. Italy had welcomed this discovery as a great blessing for human and veterinary hygiene, for agriculture, for national wealth, equally as for science.

A member of the commission which superintended Charbon vaccination at Milan, and president of the commission that performed them at Pavia, said, “I will relate briefly the conclusions arrived at on the experiments accomplished in Italy. As soon as the commencement of the current year, the Minister of Agriculture sent Professor Perroncito to Paris to learn the method of charbon vaccinations after the method of M. Pasteur. M. Perroncito immediately commenced the study; the veterinary schools of Milan, of Turin, of Bologna, of Pisa did the same. At Pavia we undertook the charbon vaccinations; at first all the experiments were not attended with favourable results—in some cases the animals died as a consequence of the vaccination; in some others, animals vaccinated and re-vaccinated died during the trials of control. We must seek the reasons for these failures; the first fault is that of having employed the vaccine of the ox for vaccinating small animals, as rabbits, guinea-pigs, white rats, and sheep, which are the most sensible reactives of the charbon virus. That which is vaccine for a resisting animal, as for example the horse, is poi-

son for an animal of feebleness resistance and kills it. It is not only the quantity that has to be precisely determined, it is especially the quality, although the quantity also may be an element that must not be neglected. A second source of error has been the proof of control; we have seen revaccinated animals die, but if we carefully investigate the history of these animals we shall find that as a rule they had not shown febrile manifestations after these vaccinations; they might really be considered as non-vaccinated animals, because they had not experienced the ordinary effects of vaccination. At Bologna, following the relation of Professor Gotti, of six sheep vaccinated four died; but if we investigate the table of temperatures which were registered after the two vaccinations, we shall find that only the two sheep whose temperature exceeded 41° C. survived; all the others, whose temperature after vaccination did not reach 41° , died. From this fact we may conclude, that we ought always to take the temperature of animals after each vaccination, and especially after the second, and that it is necessary to revaccinate a third time all the animals who have not shown a manifest access of fever; this is one of the last precepts given by M. Pasteur. In some cases there have been obtained, as at the Veterinary School of Turin, fatal results to almost all the animals in the experience of the virus of control. We may consider that, in these cases, with the charbon virus septic virus has been inoculated, and as the latter is stronger than the former, in the struggle it remains conqueror. Animals, although vaccinated with the power of resistance of charbon, may sometimes fall victims to the bacteria of septicæmia. None of these accidents have happened in the experiments performed by Professor Perroncito, at Turin, at the city of Rizzetti, and at Strambino, nor in the experiments that we made at Pavia. We operated always with the thermometer and the microscope in hand; we have, nevertheless, stumbled over another source of difficulty—it was the third possible case. The vaccinated animals did not die, neither during vaccination, nor after proofs of control, nor even after the trials of control of animals pure from vaccination and from charbon. When we experimented on ovine animals, the experiment succeeded easily and well; but when we experimented on bovine animals, the result of the con-

trol was almost always the recovery of the victims. It is true that the designated victims have always a strong fever and experience a local reaction and a phlegmonous tumor; but they do not die, at least this is so in the generality of cases. This same result has been obtained by M. Pasteur, who in his experiences of control has verified the resistance of bovine animals to charbon artificially inoculated, that charbon artificially inoculated is not so serious for oxen as spontaneous charbon. This may be dependent on two causes. The organ primarily affected during natural charbon is always the intestine, the stomach, or some internal organ indispensable to life, whilst the inoculation of artificial virus is made in the subcutaneous cellular tissue. Animals in a state of nature infect themselves with charbon on account of their proclivity to this disease, a disposition which for other animals of the same species is feeble or nil. But in experimenting we cannot always choose the animals the most predisposed, but have to take them on the chance. Animals that have recovered after this malady, local or general, have become refractory to charbon; this is a manifest proof that the anterior malady was really charbon. I can then announce that the experiments on the vaccination of charbon have had in Italy the success of a true scientific control, accomplished by the most rigorous methods, without blind enthusiasm, and without preconceived and false ideas, but with most satisfactory results.

M. Pasteur desired to make a few remarks on the communication of Professor Sormani. In the first place he was not aware that the vaccine sent by him had been used on rabbits and guinea-pigs, who are much too sensible to reactives; it is necessary always to proportion the strength of the vaccine virus to the animal to be experimented on, and the vaccine sent to Italy was only fit for the ovine and bovine species. Nothing easier than to procure it suitable for rabbits and guinea-pigs. As a consequence the experiments in vaccinating at Turin had succeeded badly. This want of success may very easily be explained, for it was the blood of a sheep having succumbed to charbon more than twenty-four hours that the inoculation had been made from. In this case the septic vibrio had been inoculated at the same time with the bacteride, and as the first kills more rapidly than the second, it is evident that the animals suc-

cumbed to septicæmia. The same thing may happen to human vaccination when it is made without care, the different viruses inoculated each evolving its particular results. It is necessary to take the greatest precautions for charbon vaccinations, especially when we are operating on a species as sensitive as the equine. M. Pasteur has seen in a series of vaccinations made during one day on sheep, the last on a horse, this terminated by septic death of the animal on account of the remaining virus in a tube which had been uncorked all day and used all day. To resume, great precautions in the technique of vaccination are necessary, and the strength of the virus must be proportioned to the species on which experiments are made. In all cases the statistical figures are to-day very encouraging for the method, since among the vaccinated animals there have died only one sheep in 300, and one ox or animal of the bovine race in 200.

THE BACILLUS TUBERCULOSIS IN ITS PRACTICAL BEARING ON THE DIAGNOSIS, PROGNOSIS, AND TREATMENT OF THE DISEASE.*

BY J. E. GRAHAM, M.D.

Ever since the discoveries published by Dr. Koch more than a year ago, pathologists have been busily engaged, first, in testing the genuineness of the discovery, and secondly, in placing a proper estimate on the presence of these bacteria in the diagnosis, prognosis, and treatment of consumption.

With regard to the first point, the genuineness of the discovery, it must be admitted that so far the great majority of the more distinguished pathologists have, by their investigations, strengthened the position taken by Koch, viz.: that the bacilli described by him are peculiar to tuberculosis, and that they are immediately connected with the production of the disease. The few who have arrayed themselves in the opposition are, as he himself asserts, with two or three exceptions, men who have paid more attention to clinical medicine than pathology, and are for that reason unable to conduct these investigations with the delicacy and skill which are absolutely necessary in the solution of a

* Read before the Ontario Medical Association.

question of this nature. When it is considered that Koch continued his investigations for two years after the discovery was made, before he published it, having at his command every facility for the proper carrying on of his work, and having at the same time a knowledge of bacteriology, perhaps superior to any existing scientist, one is surprised that men who have worked perhaps with interruptions for a few months, with very poor advantages, at a subject about which their previous knowledge was not very extensive, should be so ready to oppose themselves to the great discoverer. It may be safely said that the discovery has held its ground against any assaults which have been up to the present made upon it.

It is however with the practical aspect of the question that we, as physicians, are principally interested.

(1) Can phthisis be diagnosed by means of the presence of bacilli in the sputa? (2) Has the number of bacilli any relation to the prognosis? (3) Has the discovery aided us to any extent in the prevention and treatment of this formidable disease?

In answer to the first question, it might be said that a number of investigations have been made, and the result has been in the affirmative, that we can diagnose the presence of this disease, even in cases which would remain doubtful with our ordinary means of physical examination. You all know how difficult it is sometimes to diagnose phthisis from chronic bronchitic cirrhosis of the lungs. In cases of this kind, the discovery of the bacillus would be a sure evidence of phthisis. The most important investigations which have been made so far, are as follows:

Balmer and Fräntzel (*Berliner Klinisch Wochenschrift*, 1882, No. 45) examined the sputa in 120 cases of phthisis and in that of all of them found bacilli. In cases of chronic bronchitis they found none. They found the organisms most abundant in acute cases, and in those rapidly progressing. Prof. D'Espine, of Geneva, found the bacilli in the expectoration of twenty cases, in whom the diagnosis of phthisis had previously been made. They were absent in five cases of chronic bronchitis, with emphysema. As the result of his experiments, Prof. D'Espine does not think that the number of bacilli is in proportion to the severity

of the disease. He, however, is of opinion that they are always present in phthisis, and that several examinations should be made on different days, before the absence of bacilli should be considered certain. Dr. Kowalski, in a paper read before the Medical Society of Vienna, stated that he has since May 1st, 1882, examined the sputa from 600 patients, and that he had not in a single case found the bacilli where tuberculosis was not present. He considers the presence of bacilli to be a sure indication of phthisis, and that the number is in direct proportion to the severity of the disease. Dr. Pfeifer, of Wiesbaden, in the *Berliner Klinische Wochenschrift*, confirms the opinion of previous observers, viz.: that the bacillus is always present at some time or other in the sputa of the tuberculosis, and that they vary in number and size in direct proportion to the severity of the disease. In England, pathologists and physicians in practice have interested themselves very much on this subject. Dr. West, at a meeting of the Pathological Society of London, gave the following conclusions reached after the investigation of over fifty cases:

(1) That bacilli were found in the sputa of all cases of phthisis in which there was excavation, and that they varied in number with the rate of destruction. (2) That the arrangement in groups and masses indicated greater destruction than if the bacilli were isolated, unless the isolated bacilli were in great numbers. (3) That he had detected no variation in size of the bacilli in different cases. (4) That the bacilli being in his opinion evidence of destruction of the lung, they might, in some doubtful cases, be of diagnostic value, but that in most cases they were merely an additional confirmation of what was already clear from physical signs, and the same was true as regarded prognosis.

Dr. C. Theodore Williams read a paper at a meeting of the London Medical Society, February 12th, 1883. He, with his assistants, examined the sputa from 130 different cases. The results of his experiments agree with those already given with regard to the specific character of the bacilli. The fact that none were found in cases of bronchitis, in which the expectoration was extremely fetid and abundant, separates the tubercle bacilli from the numerous organisms connected with fermentation and decomposition. As to the bearing of these on the prognosis of the disease, he does not

think there is any definite ratio between the activity of the disease and the number of bacilli, though as a rule they are few in cases where the disease is quiescent. Dr. Whipham gave the results of the examination of twenty cases. They corresponded with those obtained by Balmer and Fräntzel. Dr. G. A. Heron gave the results of the examination of the sputa of sixty-two cases. They were similar to those already given. The general opinion of members of the London Medical Society appeared to be that bacilli were always found in cases of tuberculosis and in that disease alone. Also, that they varied in number in proportion to the severity of the disease.

In America, pathologists have interested themselves more in the question of the etiology of the disease. No series of investigations have so far been made to show the bearing which these bodies have on the diagnosis and prognosis. In order that I might satisfy myself on these two points, I examined the sputa of forty consecutive cases. The method of staining employed was Ehrlich's. The specimens were allowed to remain in the staining fluid about three-quarters of an hour at 100° F., and afterwards mounted in Canada balsam. In the majority of the cases the sputa was brought from the hospital by Mr. Patterson, and examined before I had seen the case. The experiments were conducted in this way so as to leave the mind fully unbiased. Of the forty cases, in about twenty the staining was done by myself, in seventeen it was done by Mr. Patterson, and in three by Mr. Foster. I examined all the slides myself, and also examined most of the patients. I will now give you a brief history of these cases, together with the results.

Case 1.—Mr. S., my own patient. Physical signs show consolidation of a portion of the left lower and of the right upper lobes of the lungs. The disease is of four or five months' standing, and advancing rapidly. On the first examination the bacilli were found in limited numbers, on the second they were found in large numbers.

Case 2.—Miss G., my own patient. Case of rapid tuberculosis of three or four months' standing. Other parts of the body affected as well as the lungs. Few bacilli were found on first examination, but the second proved them to be present in large numbers. Between the times of these two examinations signs of breaking down of the lungs commenced.

Case 3.—Sputa sent by Dr. Cameron; case of advanced phthisis; patient has since died; bacilli found in very large numbers.

Case 4.—Sputa also sent by Dr. Cameron, with the following history: Patient's father, mother, two brothers and two sisters died of phthisis. One brother living is subject to slight cough. In his own case the disease is of three years' standing; slight hemorrhage at different times; pulse, 124; temperature, 101; bacilli found in large numbers.

Case 5.—J. F., ward 13, T. G. H. No history accompanies this case; said to be one of phthisis; bacilli were not found.

Case 6.—B., ward 14, T. G. H. Has had cough more or less for three years, and has lost flesh; expansion diminished on right side; evidences of consolidation; bacilli were not shown satisfactorily.

Case 7.—C., phthisis. No history; bacilli found on third examination.

Case 8.—J. T., T. G. H. Patient has cough; purulent sputa; evidence of consolidation; night sweats, loss of flesh, etc.; bacilli found in limited numbers.

Case 9.—W., ward 5, T. G. H. Fifteen months standing; tuberculosis in both lungs, with pneumothorax; patient has since died; bacilli found on third examination in limited numbers.

Case 10.—Miss B., T. G. H. Patient died the day after the sputa was obtained; disease was undoubtedly phthisis; made two examinations and found no bacilli. It is probable that in this case the sputa came from the throat and not from the lungs, as the patient was very weak.

Case 11.—D., T. G. H. Has had cough for the last five years, and has expectorated blood occasionally during the last two years. The whole of the right lung is involved, and part of the left; bacilli found in large numbers on third examination.

Case 12.—J. B., T. G. H. Had an attack of pleurisy five years ago; has not been well since; shortness of breathing; not much expectoration, with greatly diminished expansion on the right side; dulness on percussion on the same side, with diminished breathing sounds; puerile breathing on left side; two examinations made; no bacilli in either case.

Case 13.—McG., Dispensary patient. Sputa sent by Mr. Foster; phthisis; bacilli were found in large numbers.

Case 14.—G., Dr. Stewart's case. Patient caught

cold seven years ago, and has been ill ever since ; night sweats ; left lung involved ; signs of cavity in the left infraclavicular region ; bacilli not numerous, but very distinct.

Case 15.—T. W., ward W., T. G. H. Cough for six months ; left lung involved, with signs of breaking down ; bacilli found in very large numbers.

Case 16.—C., T. G. H. Upper part of left lung is diseased ; not much breaking down ; disease pursuing a chronic course ; bacilli found in moderately large numbers.

Case 17.—J. R., advanced phthisis. Patient has since died ; bacilli found in large numbers.

Case 18.—Sputa sent by Dr. Burns. A case of advanced phthisis ; bacilli found in very large numbers.

Case 19.—F., T. G. H. Phthisis of six months' duration ; both lungs are affected ; patient died the day after the sputa was obtained ; bacilli not very numerous.

Case 20.—Mrs. L., my own patient. Chronic bronchitis, with dilated bronchi ; no bacilli were found, although two examinations were made.

Case 21.—Mrs. R., my own patient. She has suffered for years with chronic sub-cutaneous abscesses ; suspect tuberculous deposit in the apex of the left lung ; no bacilli were found, although three examinations were made.

Case 22.—C. my own patient. Suffering from slowly advancing phthisis ; the bacilli were not numerous, but distinct.

Case 23.—B., T. G. H. A case of chronic bronchitis, with dilated bronchi ; no bacilli ; three different examinations were made.

Case 24.—M. T., a patient suffering from advancing phthisis ; lungs breaking down ; mother and brother died of the same disease ; bacilli found in moderately large numbers.

Case 25.—M. S., my own patient, suffering from acute bronchitis, since recovered ; no bacilli.

Case 26.—Mrs. D., also under my care. She has had cough for some years. This winter she has shown signs of phthisis. Bacilli, not numerous, and small but distinct. In this case the finding of bacilli was a material aid in diagnosis.

Case 27.—C., T. G. H. Left apex involved, other parts of the lungs healthy ; bacilli not numerous, but distinct.

Case 28.—T. G. H. Patient suffering from em-

physema and subsequent development of phthisis ; bacilli found in moderately large numbers.

Case 29.—Large part of left lung involved ; disease of a year's standing ; bacilli not numerous, but distinct.

Case 30.—This and the two following cases were given me by Mr. Foster, who prepared the slides. Dr. S. since died of phthisis ; rapid disease ; bacilli numerous.

Case 31.—Patient from House of Providence. Case of phthisis ; bacilli numerous.

Case 32.—Also from House of Providence. Diagnosis doubtful ; bacilli not distinct, if seen at all.

Case 33.—G. came to me for consultation ; rapid tuberculosis, with few physical signs in the lungs ; bacilli not numerous but distinct. In this case the discovery of bacteria was of great assistance in the diagnosis.

Case 34.—B., my own patient. An undoubted case of phthisis of two years' standing ; bacilli not numerous but distinct.

Case 35.—S., T. G. H. Patient suffering from phthisis ; bacilli not numerous.

Case 36.—C., T. G. H. Has had cough for the past two or three years ; has lately lost flesh. Examination of the chest revealed the presence of bronchitis and emphysema. No bacilli.

Case 37.—N., T. G. H. Decided phthisis of ten months' standing ; bacilli numerous.

Case 38.—T., T. G. H. Case of phthisis. No history ; bacilli not numerous, but distinct.

Case 39.—C. B. Phthisis ; bacilli numerous.

Case 40.—C. G., T. G. H. Phthisis of ten years' standing, which is now in an advanced stage ; bacilli numerous. On examining these reports it will be found that thirty-three were decided cases of phthisis, three were of doubtful diagnosis, and four were cases of bronchitis, acute and chronic. In the thirty-three cases positively diagnosed as phthisis, in thirty-one bacilli were unmistakably found ; in one they were not distinctly shown, and in one (No. 10) they were not found at all, probably for the reason already given, that the patient was too weak to expectorate from the lungs. In the four cases of bronchitis no bacilli were found, and they were also absent in the three cases in which the diagnosis was doubtful. The undecided character of the diagnosis in two or three of the cases was owing to their having left the hospital.

In the great majority of cases the bacilli were found on the first examination, but in many, two, three, and even four trials were made before they were found. These investigations are of more value, as they were made by one in general practice, without any of the great facilities which belong to a pathological laboratory. They thus demonstrate the possibility of practising physicians using this as an additional means of diagnosis. Within the last two or three months Mr. Heneage Gibbs has discovered a much more rapid and simple means of staining, which will tend to its further use by the profession.

The following conclusions might reasonably be arrived at from these experiments :

(1) That bacilli are found in the sputa of almost, if not all, cases of phthisis. It is doubtful if there is any case of active disease in which bacilli will not be found, provided the sputa comes from the lungs, and five or six different examinations are made. (2) They are found on the first examination in three-fourths of the cases. (3) The presence of the bacilli is a positive evidence of the disease. (4) There are doubtful cases in which the examination of the sputa for the bacilli will be of decided value in arriving at a correct diagnosis. In three or four of the cases given the presence or absence of bacilli was to me of great assistance. (5) As to prognosis, the number of bacilli is in proportion to the amount and rapidity of the process of destruction. There are cases in which there is a rapid formation of miliary tubercle, in which the sputa will show a small number of bacilli. As soon, however, as in such cases breaking down commences, the bacilli will be found in very great abundance. This fact was shown in No. 2. (6) It might be said, as a general rule, that in the more chronic cases the bacilli are fewer in number and, I think, smaller. I must here express my thanks to Mr. Patterson for his valuable assistance in staining so many specimens.

Has this discovery had any influence on our treatment of the disease? Yes, in two particulars, the prevention and the cure. A most ridiculous argument has been used against the contagion theory of phthisis, that, if it is proved to be correct, consumptive patients will not receive that care and attention from relatives as at present. There are very many ways by which the attendants on cases of phthisis could guard themselves from the

disease without relaxing their efforts in administering all the comfort possible to the patient. Rooms could be better ventilated, sputa ought to be disinfected and frequently removed. The attendants, more especially if they also are predisposed to the disease, ought to take sufficient outdoor exercise and try in every way to keep in a good state of health.

The results of experiments made on the lower animals with regard to this subject of contagion are in my opinion as conclusive as it is possible for them to be. Altogether apart from these, however, there is sufficient clinical evidence to support this theory. In my short experience as a practising physician, I have seen enough to convince me of the strong probability of contagion in this disease. I have for instance observed the following case. A young man of scrofulous family, a young woman of a strong healthy family and one noted for the longevity of its members. Two or three years after marriage her husband became phthisical, and died after six months illness. His wife, who attended him faithfully during his illness, in a few months afterwards developed the same disease, which pursued a rapid course and terminated fatally. She was the only one of her family who suffered from phthisis. My friend and former teacher, Dr. Richardson, of this city, who for the last thirty years has been a strong believer in the contagiousness of consumption, arrived at his conclusions entirely from clinical evidence. The following remarkable case came under his observation: A young lady, the youngest of a large family of very healthy children, became very much attached to a friend who was suffering from phthisis. For two months she was her sick friend's constant companion and slept in the same room. Shortly after the death of the latter, she too exhibited signs of tubercular disease, and died within a year. The tuberculosis developed itself in her case very gradually, almost imperceptibly, showing that it was not the result of catarrhal pneumonia. Now this young lady was the only member of that family who was known to have had phthisis, in fact a remarkably healthy record had been shown for generations back. She was as strong and healthy as the others previous to her stay with this consumptive patient. Is it not extremely probable that if this young lady had not come in close contact with the disease she would never have devel-

oped it? Would it not be proper, with our present knowledge, to forbid such close intimacy which to all appearance was the cause of disease and death.

A mother suffers for some months and dies of phthisis. Two grown-up daughters wait on her. A short time afterwards the elder becomes consumptive and dies before the year is out; she is followed by her younger sister. A brother and sister who at that time were children under ten years of age, were all that remained with the father. They, on account of their age and lively dispositions, were very little with their mother or sisters. One would suppose that the younger who was born a few years before his mother's death would be especially delicate. It was generally predicted that these two would follow their sisters when they arrived at the same age. This was not the case. They are now long past twenty and in very good health. They are liable of course to contract the disease if they should come in contact with it. Take another case, a family living in western Ontario, five of whom died of phthisis one after another. A brother who left home shortly after the first case appeared, escapes the disease and is now healthy and strong. These are but a few of the many instances which I could give to support the probability of the contagion of phthisis. You may ask how it is that in such a place as the Brompton Hospital, nurses and physicians should have lived so long in the building and not have taken the disease. In order to understand this, one requires to study the peculiarity of bacteria in the etiology of disease. Some forms are exceedingly delicate and will only grow between certain degrees of temperature and on a particular kind of soil. Take for instance the *Microsporon furfur*, the parasite producing that disease of the skin Pityriasis Versicolor. According to Dr. Thinn's investigations, this will grow only in a certain range of temperature, and he experimented for weeks before he could find a soil in which he could successfully cultivate it. Such is also the case with the bacteria of tuberculosis. There is no doubt but that certain individuals possess a predisposition to the disease, and there is no doubt also but that close damp houses afford an atmosphere in which these germs luxuriate.

It is difficult to understand why very distinguished London physicians should be so opposed to the contagion theory. There are two reasons

for this. They are as a class very conservative and perhaps slow to accept new views or theories. Consulting physicians have not the same opportunity to watch the course of the disease in families as the general practitioner. The instances of contagion in my opinion are as plain as those of typhoid fever, leprosy, or even syphilis. How many are exposed to the contagion of typhoid and do not contract the disease. It is probable that the germs of this malady are at all times floating in the atmosphere near the ventilators of sewers, and yet how comparatively few take the disease. The history of leprosy is a remarkable example of how the whole profession may be misled by the opinions of a few distinguished men. This disease was considered contagious beyond all doubt by the ancients and those of the middle ages. In modern times Hebra and a few others of note from necessarily limited observation gave the opinion that the ancients were wrong, that the disease was not contagious; but at the present time, as the result of experience on this continent and the islands of the Pacific, the profession is rapidly returning to the old view, viz.: that it is contagious, and that cases should be isolated. Thus it is seen that the arguments deduced from experience in consumption hospitals are not so strong nor as convincing as one would at first suppose. Another feature in the etiology of phthisis and one difficult of explanation is shown in the following case: A woman of tubercular parentage marries a man with similar antecedents. Nine children are born to them, every one of whom died of tubercular disease, some in the earlier years of tubercular meningitis and tabes mesenterica, while others at eighteen or twenty years of age died of pulmonary phthisis. In such an example it is difficult to understand how the children could become tuberculous at so early an age from outside influence. It is possible that they might have been infected through their mother's milk, or from the milk of diseased cattle. Dr. Watson Cheyne, in his experiments as given in the April number of the *London Practitioner*, found that when inoculations were made on pregnant animals the tubercular disease was not conveyed to the foetus in utero. This is a point which needs further investigation. These are certainly cases in which it would appear that the germs might have been reproduced in this way.

As a result of this discovery it may be asserted

that physicians are now more careful in the disinfection of sputa, ventilation of sick rooms, and in warning healthy members of a family from intimate contact with the disease. If on the outbreak of the disease the one affected were immediately sent to a warm equable climate, we would not have the sad record of a whole family falling victims to this dreadful scourge.

The inhalation treatment is the direct outcome of the germ theory of phthisis. A paper was read at the last meeting of the Association by Dr. Philp, in which the records of successful cases were given. In England there is a difference of opinion on this point. The experience of some has been negative, while others have had very good results. In my own experience I have found respirators of benefit in allaying cough, but have seen no positive results in the cure of the disease.

A CASE OF ACUTE TRAUMATIC TETANUS; EXHIBITING THE EFFECTS OF COMPLETE INSULATION OF THE WOUND BY NEUROTOMY.*

BY WM. BURT, M.D., PARIS, ONT.

The young woman I bring before you to-day is one of two cases which are reported in the *New York Medical Journal* for June, 1876, as having suffered from acute traumatic tetanus. It is now seven years since the report was made, and nearly eight years since she suffered from that disease, which may be ranked with the most formidable and distressing that come under the notice of the surgeon. My apology for presenting her to you at this meeting, although a report has already been made, is that a presentation of the patient, which has not heretofore been done at any association, is often of more benefit than simply a rehearsal of the history or a drawing on paper, no matter how skilful the artist. Another reason is that I have a second edition of the article referred to to offer you. I shall not detain you with any lengthy history, but allow you to read and observe for yourselves. The method of operating which I wish to speak of consists in completely insulating the tetanic wound, when occurring in the extremities, by neurotomy, performed on the main nerve or nerves leading to the wound, and by means of a transverse incision dividing the superficial sensory

nerves that also supply it. This will completely insulate the wound, as I claim to have done in this case, and which I claim may be done in many cases that come under the notice of the surgeon. The operation I performed on this right arm was the insulation of a wound on the radial side of the forearm by dividing the musculo-spiral nerve at the bend of the elbow, and the sensory cutaneous nerves by a transverse incision lower down. I made the remark in my first report that I considered amputation uncalled for, unless for other reasons, save in the case of the fingers and toes. To this I now take exception and would have erased that part which refers to the phalanx, as I believe better results will follow complete insulation of the parts higher up by neurotomy than by amputation. I wish also to point out to you that whereas I operated on the third day of the disease, I would now operate immediately on recognizing the case to be one of acute traumatic tetanus.

One word in reference to nerve-stretching, which has been introduced in recent years as a treatment for this disease. I do not know that this operation has received a more classical name; it may be that it is still upon its trial and not ready for a classical baptism. However, as far as the history of nerve-stretching in traumatic tetanus goes, it does not appear satisfactory to me. It does not appear that you can completely insulate a wound in the extremities by this method. Any surgeon can perform the operation of complete insulation by neurotomy, but I believe many surgeons, after performing the operation of nerve stretching, would not feel sure that the nerve was rightly stretched, if we are justified as yet in using the word rightly at all here. It is still further shrouded in such terms as "moderate traction," "a considerable degree of force is to be exerted," and "in tetanus it may do good by diminishing the excitability of the different nerves." My reason for presenting you but one case operated on is that I know of no other operated on in a similar way, and it may never be my lot to have another. Many surgeons are often for a long time without a case of acute traumatic tetanus, and then again two or three may present themselves close together. On account of the fatality of the disease, anything that would promise any hope of relief I claim we would be justified in resorting to. In the issue of April 21st of the *London Lancet*, Mr. Geo. Lawson, of

* Read before the Ontario Medical Association.

the Middlesex Hospital, is responsible for the following words in a description of a case of acute traumatic tetanus:—"The following case is an example of acute traumatic tetanus, a disease from which a patient very rarely if ever recovers." And the same opinion I heard given by one of our celebrated American surgeons, when standing by the bedside of a youth suffering from the disease. The latter opinion was given thirteen years ago, the former but to-day, as it were, so that during the last decade the prognosis of acute traumatic tetanus has changed but little, if any. This, Mr. President, is my apology for presenting you this case to-day, a case in which the operation of complete insulation was followed with immediate and satisfactory results. The spasms prior to the operation came on every few minutes. After the operation they were much less in severity, and ranged from twelve to five a day during the following week. Within three months after the operation, she returned to her work at the factory, having nearly recovered full use of her arm. The operation was performed under chloroform and with the aid of Esmarch's bandage, both of which are helps, I believe, in relieving the tetanic spasms, but helps not to be relied on to the exclusion of complete insulation by neurotomy performed at the earliest opportunity.

Correspondence.

SPLINT FOR THE FOREARM.

To the Editor of the *Canada Lancet*.

SIR,—In regard to the discussion at the last meeting of the Ontario Medical Association, held in Toronto, regarding a splint for the forearm, some of the speakers maintained that it was impossible to preserve the normal width of the interosseous space by any splint or appliance. I understood that Dr. McNaughton claims (and I say justly too,) that if we secure the normal curve of the forearm and press closely towards the interosseous space that there can be no deformity in fractures near the lower end of the radius. After giving the splint a fair trial in six consecutive cases of Colles' fracture, I am satisfied that I have had better results than with any splint I formerly used. I consider it maintains the normal curve of the forearm, and

fixes the hand in a natural position with a facility and certainty that leaves nothing to be desired in the way of a retentive appliance.

A. H. MCKINNON.

Hillsburg, June 25, 1883.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

Regular meeting May 17th, the president, Dr. Graham, in the chair. The treasurer, Dr. Spencer, presented his report—referred to the Council for audit.

Dr. McPhedran presented the following case. A woman *æt* 40; mother of eleven children, twins being born on two occasions; miscarried twice, each of these also twin pregnancies; nursed the first three children. Fourth child was nursed till three months old, when the mother's face and legs began to swell. By the fifth month the face was so swollen as to "bury the ears" and the eyes were almost closed. The swelling was hard and smooth, and the whole face of a purplish color: a hard swelling as large as an English walnut on the right frontal eminence. She was unable to lie down owing to rushing sensations in the head and ears; these sensations were almost constant but greatly aggravated by lying down. Child was weaned at the fifth month; recovery not complete till five months later. At next pregnancy she was confined of twins, tried to nurse them, and the symptoms described above returned immediately. This time she became purple all over. Recovered under former treatment in a month. After each subsequent accouchement the symptoms returned in the third month after confinement, though no effort was made to remove the children; but she had no trouble after the two miscarriages. She was last confined in December, 1882, twins—and the symptoms of her old trouble began three months later. In the face there are many hard nodules, especially in the track of Steno's duct; some of them have disappeared and fresh ones developed. There are many small ones on the inner surfaces of the cheeks and lips. They are not tender nor painful. The face is slightly puffed and darker in color than natural. The knees are swollen, the right especially, presenting the appearance on the outside when flexed of an accumulation of synovia. She is un-

able to kneel. The elbows were slightly swollen and frequently gave a cracking noise when flexed. The nodules are doubtless due to enlargement of the lymphatic structures, owing perhaps to engorgement and apparently caused in some way by lactation. The case was submitted to elicit the opinion of the Society as to the nature of the affection and the course of treatment most advisable to be pursued.

Dr. Cameron considered the enlargements due to dilatation and occlusion of the lymph channels—really a lymphatic thrombosis—instead of the venous thrombosis so often seen after confinement. Dr. Workman suggested electricity as treatment.

Dr. Ferguson read a paper on Puerperal Pyrexia. This may be, 1. Neurosal, the elevation of temperature here being dependent upon altered relationship of nerve governance. 2. Cases due to such causes as constipation, urinary derangement, etc. 3. A deranged relationship between the effete matters entering the circulating fluids and those rejected. 4. Malarial fever in the newly confined. 5. The septic diseases proper, viz.: (a) Sapræmia, or the entrance into the system of dead poison; this always has a local origin, and (b) Septicæmia, from local or constitutional infection. In this condition the free use of quinine is indicated. As illustrating the value of this drug he mentioned some experiments on dogs. To No. 1 he gave five grains every six hours. After three doses the contents of a hypodermic syringe of offensive lochial discharge was injected. No. 2 received a similar injection, but five grains of quinine had been added to it. No. 3 received the injection without quinine at any time. Nos. 1 and 2 recovered, No. 3 died in forty-one hours. To be effectual in cases of puerperal septicæmia, this drug (quinine) must be given to the amount of $\frac{1}{10}$ of the weight of the patient, twenty grains would be the minimum dose. Discussion on the paper was postponed till next meeting.

Regular meeting May 31st, the president in the chair. Dr. F. Krauss and Dr. M. Wallace were elected members.

Dr. Riddell brought forward two patients, the first showing an admirable example of Eczema Pustulosum; the second with a deep seated tumor of the neck, considered by Dr. Aikins and Dr.

Fulton to be cancerous. Operation was not advised. A discussion then took place on Puerperal Pyrexia, the paper read at the previous meeting.

Dr. Oldright considered that the type of this affection lately had been metritic.

Dr. Cameron regretted that the essayist had given no rules for differentiation; because if slight causes, as mental emotion, may send the temperature up 3° or 4° , it is of importance to be able to distinguish such cases. According to his observation, peritonitis seems more common than metritis.

Dr. Ryerson referred to the case of the Duchess of Connaught to emphasize the importance of good sanitary arrangements in accouchements.

Dr. McPhedran considered that general puerperal septicæmia may be complicated by a local diseased condition. A case in point was given. Sepsis may be effectually guarded against by proper precautions.

Dr. Machell showed a placenta and foetus. Mrs. W. menstruated last time 9th November last. In December and January more or less morning sickness and pricking pains with a feeling of fullness in the breasts. Slight enlargement of abdomen towards end of January. During the latter part of February breasts became softer, and later, flabby; pricking pains ceased and abdomen seemed to get smaller, at the same time feeling cold and uncomfortable. These latter feelings have continued since last named date. Knowing that she had a fleshy mole two years ago, she was under the impression that this might be something similar. A vaginal examination revealed the fact that the uterus was enlarged to about the same size as in pregnancy between third and fourth month. Gave a placebo and asked her to report in a month. An offensive discharge brought her back in three weeks, when he introduced a bougie into the uterus and left it there. Within twelve hours labor came on and a few hours later brought away a dead foetus with membranes intact and placenta attached. Foetus was probably between the third and fourth month, of a greyish leaden color. Sac contained a dark colored grumous fluid—nothing abnormal in the appearance of placenta. No cause for the death of foetus could be ascertained.

Dr. Davidson read the report of the meeting of Council, which was adopted.

Regular meeting June 14th, the president in the chair.

Dr. Cameron showed a boy, æt. 18, with the following history. At 5 years he took scarlet fever, was much reduced, but no otorrhœa or anasarca. At 6 years had St. Vitus' dance, which lasted seven months. At this time he complained of his nose. At 12 years he went to work on a farm, and kept well till three years ago, when he had zona for three weeks—after this whenever he got wet a rash came out on the lips and they would swell. About a year later the throat and nose became sore. Difficulty in swallowing and scabbing in nose, followed by discharge and offensive breath. Kept getting worse until a year ago in April when he went to the Hospital, where he remained a month and improved under carbolic spray and internal medication. Has been subject to otorrhœa from left ear and when in Hospital got erysipelas. Besides the otorrhœa, he presents the somewhat rare condition of adhesion of the soft palate to the pharynx, with perforation. Dr. Cameron considers it a case of congenital syphilis, the adhesions being due to the breaking down of gummata.

Dr. Palmer, referring to the presence of tinnitus remarked on the cause, viz., rarefaction of the air in the naso-pharyngeal space. He prophesied complete deafness, unless a communication were established between the mouth and naso-pharynx.

Dr. Reeve remarked that an opening through the membrana tympani might accomplish the desired end.

Dr. Cameron thought that the perforations in the soft palate allowed sufficient communication—operations for that purpose had usually been unsuccessful. He suspected necrosis of the bones in the nasal cavities; if so, their removal would doubtless improve matters.

Dr. Macdonald presented a heart containing only two cavities, viz., an auricle and a ventricle. History. K., æt. 12, tall for her age, an inmate of the Orphans' Home. Has always been cyanotic. Heart's action labored, with a pre-systolic murmur at the base, best heard to the left of the sternum, at the second intercostal space. Breathing regular. Has had no pain. Death caused by tuberculosis. The condition of the heart was only discovered post mortem. During life the foramen ale was supposed to be potent.

Dr. McPhedran considered the murmur to have been caused by the meeting of the venous and arterial streams in the single cavity.

Dr. Cameron referred to the theory of the formation of the normal heart from a single blood-vessel; he asked Dr. Sheard's views.

Dr. Sheard explained and illustrated Kolliker's idea. The tube is bent upon itself, the septum being formed by coalescence of the walls of the vessel. This septum grows downwards, ultimately completing the separation between the ventricles.

Dr. Ryerson showed a temporal bone which was carious to a large extent on the superior surface of the petrous portion. It was removed from a man æt. 32, having the following history. On the morning of May 24th he was seen by Dr. Sweetman; had great pain in head; dizziness, seemed rather silly. Temperature 101°; anorexia, constipation. History of chronic discharge from right ear. Symptoms varied in severity for a couple of days when he was advised to go to the Hospital. When seen by Dr. Ryerson on the 26th he had great pain in the head. Vomiting of most offensive material; quick, weak pulse, delirium, and loss of appetite. There was a brownish and very offensive discharge from the right ear. He was almost absolutely deaf. Ophthalmologic examination was negatived by the restlessness of patient. There was no swelling or venous enlargement over mastoid process or zygoma. He made a free incision, about 1½ inches in length, down to the bone over the mastoid with a view to local depletion. Bled freely for an hour, after which patient seemed a good deal better; pain much less. Symptoms, however, recurred. He became gradually comatose and died June 7th. Post-mortem next day revealed a large quantity of serous fluid beneath dura mater; pus along base of brain and a collection of pus in the substance of hemisphere, separated some distance from carious bone by comparatively healthy brain substance. Dr. Ryerson, in remarking on the case, pointed out the importance of attending to discharges from the ear. In the vast majority of cases the pus comes from the middle ear. Out of seventy-six cases of abscess of the brain, recorded by Gull and Sutton, twenty-five, or nearly one-third, were caused by ear disease. Field, of London, states that of five hundred cases of perforation of the membrana tympani from *all causes*, one per cent. died of abscess of the

brain. The question might arise in such a case as the above, would perforation of the mastoid have been advisable? Probably not. An instance was mentioned in which the symptoms were held to justify the operation. The relief, although great, was only temporary.

Dr. Reeve pointed out that suppurative otitis may, in many instances, be prevented by free and early local depletion, irrigation with a solution of atropine, and the use of Turkish and other baths.

Dr. Sheard showed a peculiar cyst—which was in connection with both ovaries, these being in a state of suppuration. Was it ovarian or parovarian? He inclined to the opinion that it was ovarian.

The President presented a specimen of Pleuritis and Endocarditis. On cutting into the left pleural sac, at the autopsy, what seemed almost to be a third pleural covering was seen. It was placed between the visceral and costal layers—being very slightly adherent to the latter.

RIDEAU AND BATHURST DISTRICT.

The 10th annual meeting of the above named medical association was held at Arnprior, on Wednesday, the 27th of June. A most important feature of this meeting, which is held soon after the Medical Council has had its annual session, is the address and report of the president, who is the representative for the district. The members are thus brought into intimate relation with the Council, and the course of the president made easy by knowing the views of those he represents. At the close of the address the election of officers was proceeded with, resulting as follows :—

President, Dr. Cranston, Arnprior; Vice-Presidents, Drs. Malloch, Ottawa, and Groves, Carp; Treasurer, Dr. Hill, Ottawa; Secretary, Dr. Small, Ottawa; Council, Drs. Dickson, Pembroke; Armstrong, Arnprior; Rattray, Cobden; Burns, Almonte; Baird, Pakenham; Bell, Bearbrook; Grant, Sweetland and H. P. Wright, Ottawa.

Papers were read by Drs. McFarlane, Almonte, and Groves, Carp. The former gentleman presented a very exhaustive paper on the "Management of the Bowels in Typhoid Fever." He referred to the many conditions that may be present, but the principal point was to deprecate any effort to render the bowels costive and to favor the maintenance of free evacuation throughout the course of the disease. In the discussion

which followed, the general tenor of the remarks coincided with the reader's views. Dr. Groves' paper was upon some "Cases of Lead Poisoning" occurring in his practice, the source of the poison being a jar of vinegar, the fluid acting on the lining, which contained free litharge. Dr. Burns reported a case of gun-shot injury to the abdomen. A long discussion upon abdominal injuries in general followed.

The secretary distributed pamphlets and circulars issued by the Board of Health, requesting that the blanks should be filled and forwarded to Toronto. The next meeting will be at Ottawa in January, 1884.

Selected Articles.

HEMORRHAGE FROM THE RECTUM.

The causes and treatment of hemorrhage from the rectum, of a character requiring surgical treatment, are thus concisely summarized in a paper by Dr. J. M. Matthews, of Louisville, read by him before the Kentucky Medical Society (Louisville *Med. Herald.*)

Causes: The causes of hemorrhage from the rectum may be briefly named as follows:

1. Hemorrhage following the ligation of internal piles.
2. From ulceration of the bowel.
3. From capillary hemorrhoids.
4. From hemorrhagic diathesis.
5. From polypi.

These in my opinion constitute the only causes of hemorrhage requiring surgical interference. The existence of piles in all classes is recognized. The operation for their relief is often attended with much bleeding. True, that surgeons do the operation thousands of times without such an occurrence, yet so able a surgeon as Sir Astley Cooper lost a patient from hemorrhage after the ligating of a pile. There are three causes for hemorrhage following this operation, viz:—1. The division of a vessel or vessels at the time of operating. 2. Puncture of a vessel in transfixing tumor. 3. In sloughing of the pile.

The hemorrhage that takes place after ligating the tumors may be accidental, recurrent, or secondary. Primary hemorrhage is rare. It has been my experience that it is seldom necessary to apply a ligature for its arrest. Indeed I have never had occasion to do so in my practice. If a general oozing takes place, say after the recovery from shock, it can usually be arrested either by pressure or the application of *hot* water. If *cold* is used the reaction will sometimes prove dangerous. I am sure that hot water acts as a stimulant to both the

walls of the vessels and to the nerve fibrils in the wound. One advantage in its use is that it does not produce shock. That it is a valuable *hemostatic* can not be doubted. The styptic solutions of iron can not be used in these cases because they destroy the ligatures that have been applied to the piles.

Puncture of a vessel in transfixion. In the method advocated by Dr. Van Buren of New York, of transfixing these tumors, much bleeding may occur from the piercing of a blood-vessel by the needle. The only remedy in such event would be to draw down the pile and place a ligature *above* the point of bleeding.

Hemorrhage from sloughing of the tumors.—This is seldom met with if the operation is by the ligature. It has been the misfortune of the writer to see several severe cases of the kind following the operation of injecting piles with carbolic acid. In hemorrhages from sloughing, it is out of the question to attempt to apply the ligature. Recourse must be immediately had to plugging the rectum. This is best done by taking a bell-shaped sponge and threading it through the apex with a stout string, wet it in water and powder with the *persulp. iron*; push it gradually and steadily up the rectum, and pull upon the string, this expands the sponge and causes equal pressure. In lieu of this arrangement, cotton wool can be treated in like manner and placed in position through a speculum.

Hemorrhage from ulceration of the bowel.—I use the term *ulceration* here, believing that it is an *ill* term and should not be used in this connection, yet the authors have failed to give us a better one. True ulceration is not and can not be accompanied with much bleeding, for the reason that there is sufficient inflammatory action incident to the disease to clog the vessels, hence to *prevent* hemorrhage.

The condition to which I desire to direct your attention, in contradistinction to ulceration, is an *abrasion* sometimes found in the epithelium of the gut. This may arise from trivial causes, as the passage of hard fecal matter, etc. The result may cause serious alarm. There is no inflammation attending this "peeling" off. In its incipency, the blood pours freely from the capillary structures unless active measures are taken to suppress it. The discharge may be pure blood, or blood mixed with the mucus of the bowel. Very many of these cases have, I am sure, been mistaken for other affections, notably, dysentery.

Treatment.—The object of treatment in cases of this nature is of course to produce sufficient *inflammatory* action to clog the vessels with lymph. The very best application to accomplish this is in my opinion *pure carbolic acid*. It should be applied not only to the abrasion proper, but to the mucous membrane surrounding it. It stops hemorrhage

and does not destroy the membrane. Nitric acid, or the acid nitrate of mercury, would likely accomplish the same purpose, but at the risk of producing stricture. It would be inconvenient to apply the actual cautery. Very little account of the affection of which I am speaking is given in the works on surgery, or in the books devoted to diseases of the rectum; unique they may not be, but certainly demand more attention than they receive.

Hemorrhage from capillary piles.—It will be remembered that these are the small, spongy, raspberry-looking pile which is often met with. Its disposition is to bleed upon the slightest provocation. The blood lost is usually pure arterial. A hard stool, or straining at stool, is common cause of a rupture, and the amount of blood sometimes lost is enormous and may end fatally.

Treatment.—In my opinion it is best, in order to arrest the bleeding, to catch up the entire spongy mass and secure it by a silk ligature. The ordinary tenaculum forceps used in ligating piles are objectionable in these cases. They tear through the mass and cause fresh bleeding, besides they do not enable you to secure the mass with ease. I have devised a forceps which is made by Adolph Fischer of this city, which answers the purpose better. It has a *serrated* edge, instead of *forks*, and placed on the handle at an angle of about forty-five degrees. In many cases I have stopped the bleeding by the application of pure nitric or carbolic acid. The actual cautery here is a most excellent remedy. The thermo-cautery is the form in which it should be used.

Hemorrhage from a hemorrhagic diathesis.—This as a cause for hemorrhage from the rectum is scarcely mentioned by the authors. That it occurs, has been evidenced in my practice, and when met with is of the most serious nature. Local measures seem to do but little good, and it is to be questioned if such patients are ever relieved. The diathesis is manifested in the rectum, as it would be in any other, or all portions of the body. The slightest scratch, or abrasion, or handling the part is sufficient cause for the hemorrhage, which is often uncontrollable.

Treatment.—This diathesis may be hereditary or it may be established by habit. Sedentary life conduces much to its production. The habits should be diligently inquired into, and a change, if necessary, positively enjoined. Exercise, fresh air, proper diet, etc., should be carefully looked after. The sheet-anchor, in the treatment, I believe to be *ergot* or *ergotin*. This should be combined with iron and given for its full effect. The best local applications are, hot water (injected), *subulp. iron*, and pure *carbolic acid*. Each repeated as often as the case requires. The last cause which I have named for hemorrhage from the rectum calling for surgical interference are polypi. These

tumors may lie above the sphincter muscles for a long time, giving no special inconvenience, but all at once they may begin to bleed, either from detachment or other causes. They are very vascular and fed by a good-sized vessel. They should be brought into view and the pedicle ligated. This is best done under an anæsthetic, and by dilating the sphincter forcibly. If hemorrhage should occur from the sloughing of the tumor, or from its being torn off, the pedicle, or stump, must be sought, and if it is not possible to include it in a ligature, the rectum should be plugged in the manner here-in described.

Hemorrhage from all the sources mentioned here has frequently been met with in my practice. If a proper diagnosis is made before serious damage is done by the loss of blood, the remedy is easily applied. A thorough investigation of each and every case is necessary to determine the remedy, and if the attention of the profession is so directed, I feel that the object of this paper has not been fruitless. I have met with one case of vicarious menstruation through the rectum, but such cases are very rare and require no treatment.

EXCISION OF THE KNEE.

Resection of the knee has long been an accepted surgical procedure in this country and in Germany, and the names of Fergusson and Langenbeck will always be associated with its early history. In France, however, it has been strenuously opposed, and in M. Ollier it has found a severe critic, who early drew attention to the serious shortening of the limb resulting from the operation when performed in young children, and to its high mortality among adults. He has stated that while the mortality after amputation of the thigh in cases of chronic suppurative osteo-arthritis was 40 per cent., the death-rate from excision of the knee in quite similar cases rose as high as 80 per cent. In an article in the last two numbers of the *Revue de Chirurgie* he makes a full recantation of these views, and, while speaking in a highly appreciative manner of the operation, offers some suggestions as to the methods of its performance which are well worthy of attention, particularly as coming from a surgeon of perhaps unequalled experience in this class of surgery.

M. Ollier has not altered his opinion of the value of excision of the knee in young children. His own investigations, corroborated by Prof. Humphrey and borne out by not a few lamentable cases, have conclusively shown that if the whole of the lower epiphysis of the femur be removed, as is often necessary, the growth of the limb is interfered with to a disastrous extent; and if the surgeon be able to preserve a part of the epiphysis, yet the disturbance occasioned by the operation to

the nutrition of the actively growing portion that is left behind is so great that even then the limb is seriously shortened. On this account M. Ollier rejects altogether the operation of excision of the knee for patients under eight years of age. He further adds, in reference to this, that these patients are excellent subjects for incisions into joints, scraping, and free drainage; and that, if these measures fail, amputation is the sole resource. In this view we believe he is in accord with British surgeons.

The change that has taken place in M. Ollier's estimate of the value of excision of the knee has resulted from the success attending in his hands the use of a strict antiseptic plan of treatment. In place of a mortality of 80 per cent., he is able to record a series of seven successive resections of the knee, with only one death, which took place a few hours after the operation (from carbolic intoxication he believes)—a mortality of 14 per cent. During the last session he had twenty-two resections of large joints and amputations of the thigh or leg, without a single instance of infective mischief; while ten years ago, he states, he would have lost from 40 to 50 per cent. of such cases from erysipelas or pyæmia. Well may he exclaim that antiseptic dressings have so altered the conditions attending operations that it is necessary to review with care opinions founded upon data obtained under the old system.

The method of operating that M. Ollier advocates is the subperiosteal, but he would vary its details according to whether it is performed for injury or disease. For injury he recommends a single vertical median incision over the front of the joint, extending quite into the joint above the patella, and also below where the ligamentum patellæ is to be split. He then saws through the patella vertically, but before completing the excision of the articulated surfaces through the opening thus made, he makes an incision for drainage on each side into the joint, one just in front of the biceps tendon, the other in front or behind the sartorius, and subsequently he places a drain in each of them. He then divides the crucial ligaments, bends the joint fully, protrudes the femur and peels off from it the periosteum and ligamentous and tendinous attachments, and saws off the end. He treats the tibia in the same way. The sections of the patella are then wired together, and the wound closed with a drain at its upper and lower end. When operating for disease he recommends that a freer opening be made into the joint, as more room is required for the following up of all the recesses of the synovial cavity and for the treatment of the patella itself. He therefore employs an H incision, making a straight cut into the joint below the patella, extending laterally not quite as far as the lateral ligament, and not being quite so long as the transverse diameter of the

condyles. From each extremity of this he makes a vertical cut upwards and downwards, of a length varying with the extent of the disease and the amount of bone requiring removal. In this way two small flaps are marked out, of which the lower is always the smaller. Two incisions for drainage are made at the sides of the joint, as in the other operation, care being taken to have the inner one behind the sartorius tendon, and both of them made without injury to tendons. The upper flap is then raised, the joint well explored, and the patella, if necessary, removed by shelling it out from its anterior periosteal investment. The periosteum and ligamentous and capsuled attachments are then carefully peeled off from those parts of the femur and tibia which are to be removed, and those bones are sawn across. The synovial membrane is excised or scraped, as the case may be, and an opening for drainage made at the top of the suprapatellar pouch; then the bones are united by two wire sutures, and the cutaneous incision united, special care being taken to stitch together the cut ends of the ligamentum patellæ.

M. Ollier first points out that the aim of the surgeon is to obtain bony union after excision of the knee. To preserve the periosteum where possible directly aids in the ossific union of the two bones, while to leave the lateral ligaments as well as the posterior intact, is an important aid in maintaining the bony parts in exact and firm apposition. He lays considerable stress upon the importance of suturing carefully the divided ends of the ligamentum patellæ, so as to enable the quadriceps extensor muscle to counteract the tendency of the flexors to displace the tibia backwards. In cases of compound comminuted fracture into the knee-joint, M. Ollier is in favor of excision, even where a great length of bone has to be removed, and he suggests that in such cases it would be well to remove a part of the soft tissues in front of the joint; if not, when the ends of the bones are approximated the soft parts are greatly relaxed and bulge considerably around the bone, and as the flexors shorten more quickly than the extensor muscle, there is great danger of displacement of the tibia backwards, which can be prevented by artificially shortening the extensor tendon.

M. Ollier hopes that hereafter excision may be successfully performed in military surgery. In connexion with this, it is interesting to note that in the volume of the "Surgical History of the American War," just issued, it is recorded that excision of the knee-joint was performed for shot fracture in fifty-seven cases, with a total of forty-four deaths, ten recoveries, and three cases in which the issue has not been determined. In thirty-two cases the operation was primary; four patients recovered, but in one of them secondary amputation of the thigh was performed. Only one out of thirteen cases of intermediary excision proved successful; but of

seven secondary operations, as many as four, or 57 per cent., were successful. This was before the days of antiseptic surgery, at a period when M. Ollier was having a mortality of 80 per cent. in excisions for disease.—*The Lancet*.

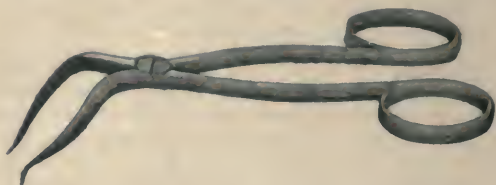
TRACHEOTOMY.—A NEW DILATOR.

BY W. J. OTIS, M.D., BOSTON.

The operation of tracheotomy is by no means a simple operation, and its performance is probably more dreaded by surgeons than that of any other. Numerous instruments have from time to time been invented for the purpose of making its performance more easy; but of these very few are in general use, nor can it be said that any of them are indispensable, as any competent surgeon could if called upon suddenly perform the operation with the instruments found in the ordinary pocket-case, improvising a tube by bending up a probe or a piece of wire, or dispensing with the tube entirely and stitching the cut edges of skin and trachea together. If, however, the surgeon has sufficient time to select his instruments according to the peculiarities of the case, it is then that some of the special instruments will be found of great assistance.

Of the numerous instruments that have been invented for this operation the greater part of them are either tracheotomes or dilators. There can be no doubt of the superiority of the knife over any tracheotome, and in the hands of the incompetent the latter may prove a dangerous instrument. As for the dilators, they are not easy to insert, are liable to slip out, and take up so much room in the tracheal wound that it is difficult to insert the tube.

The accompanying cut represents an instrument



devised by the writer, the peculiar feature of which is a tenaculum and dilator combined. The action is the same as in the Richardson dilator, the blades being bent at an angle instead of being parallel, so as to act as retractors of the soft parts, and each blade terminating in a hook. The point of each hook being turned down aids in introducing. By pressing the points lightly against the trachea and opening the blades the hooks insert themselves firmly into the trachea, leaving space enough between them for the knife to pass. The instrument is now a tenaculum, by which the trachea can be

lifted forward and held firmly before opening it, which is particularly to be desired when operating on children, where the trachea is situated deeply and often has a great range of up-and-down movement. To open the trachea the knife is inserted between the blades, and as the rings of the trachea are cut the instrument can now be used as a dilator, holding open the edges of the cut perfectly with no danger of slipping out.

The interior of the trachea can now be inspected, false membrane or any foreign substances removed, and hemorrhage stopped previous to inserting the tube. As the blades of the dilator take up no room the tracheal opening need be made no larger than is absolutely necessary to admit the tube. The tube can be readily inserted, and the dilator quickly dislodged by merely closing the blades.

The advantages claimed for this instrument are :—1. A tenaculum for elevating the trachea and controlling its movements. 2. A dilator, the operator never losing his hold on the first opening made into the trachea. 3. The blades of the dilator being hooks take up no space, and allow easy introduction of the tube through the smallest possible opening.

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SUCCESSFUL CASE OF REMOVAL OF LARGE SPLEEN.—A successful case of removal of the spleen in leukemia, by Fernando Franzolini, of Turin, is recorded in the *Wiener Medicinischen Wochenschrift*, No. 20. The patient was a pale, delicate woman, twenty-two years of age, who worked in a match factory at Paderno. From childhood she had been sickly, and since the age of seventeen menstruation had been irregular, and at times she had suffered from hysterical symptoms. She had never lived in a malarial region, and had never suffered from intermittent fever. The white blood-cells were five times more numerous than normal. There was no albumen in the urine. An incision was made along the linea alba to the left of the umbilicus, twenty-two centimeters (eight inches and a half) in length. The coils of intestine and the large omentum which presented were protected by warm-water compresses, and the spleen, with the help of the assistants, was pushed out of the wound. On account of the shortness of the pedicle in the floor of the peritoneal cavity, it was found necessary to place a double silk ligature on the splenic artery, which was the size of the forefinger, and on the vein, which was the size of the thumb. The gastro-splenic ligament, included in two ligatures, and the diaphragmatic, in one ligature, were divided. The patient lost scarcely a spoonful of blood. The operation lasted eighty minutes. The spleen measured, in length, ten and one fourth inches; in breadth, six and one half inches; in thickness, two and three fourth inches; and weighed, after

removal of nine ounces of blood, fifty-two ounces. The wound healed, and the patient is perfectly well with the exception of severe uterine pain at the menstrual period. The white cells diminished gradually, and in January, 1882, four months after the operation, showed almost a normal condition.—*Louisville Med. News*.

CHLOROFORM BREATH IN GASTRIC DISTURBANCE.—The French correspondent of the *Medical Press* (April 18, 1883,) says :—There is a symptom of gastric disturbance in children which I have never yet seen mentioned in any text-book, French or English, and yet it is almost invariably constant and generally to be met with at the *début* of the affection, so that it may be considered as a sure premonitory sign. I mean that of the breath, which smells as if the child had freely inhaled chloroform. I have always found that this "chloroform breath" not only commenced with the gastric disturbance, but continued during the whole period of the malady, and that its cessation indicated also a cessation in all the other general symptoms, fever, vomiting, etc., and consequently a return to health. I have remarked this peculiar odor in children of every age, and once in a grown-up person; it was then very strongly marked. I do not pretend bringing to light anything new, but I have never heard this peculiar symptom alluded to anywhere. In gastric derangement or *embarras gastrique*, as the French call it, the breath has always been described as possessing a heavy odor, but that is very different from the chloroform smell which is sometimes so pronounced as to be liable to induce the medical man to believe that the patient had been using the anæsthetic.

Another correspondent writes to the same journal (April 15, 1883) as follows : As a corollary to your French correspondent's remarks in last week's *Medical Press*, I may mention that this phenomenon is not confined to gastric disturbance. It is at times common immediately after sexual connection, and during the act a naturally foul breath may become quite sweet and of a distinct chloroform odor. The explanation is to me a mystery, but I am *positive* as to the fact.—*Med. & Surg. Rep.*

TREATMENT OF FRACTURES OF THE LONG BONES.—Dr. James R. Taylor, of New York, read a paper on the above subject before the American Medical Association, June 6th, 1883, in which he briefly presented some methods of diagnosis and treatment from the extensive surgical *clientele* of the out-door department of Bellevue Hospital. He first spoke of fracture of the thigh bone, which he treats with a saddle made to fit into the perineum, whereby he secures the most perfect comfort possible by any apparatus used for the purpose of counter-extension. This neatly devised little sad-

dle is held in position by a strap, running to the headboard on each side, thus securing the patient in an immovable position. By fastening strips of adhesive plaster, previously secured to the leg, to a screw arrangement in the foot of the bed, he can produce any desired degree of extension of the limbs by simply turning the little screw at the foot of the bed; the chief advantage of the whole apparatus over all other instruments being the little saddle on which the patient sits, as it were, with comfort, he claims, rather than misery, as in most other methods. He announced himself as opposed to the old method of using stones and other suspensory weights to produce extension of the limbs, and then turned his attention to the treatment of fractured ribs. He brings the broken ends into place by raising the arms over the head, an original method by which he claims there is no trouble in adjustment. They are then held in place by a band of adhesive plaster around the body.—*Med. News.*

DIAGNOSIS OF PERI-NEPHRITIC ABSCESS.—In an excellent paper on Peri-nephritic Abscess (*Am. Jour. Med. Sci.*, April, 1883), Dr. J. B. Roberts gives the following tabular statement of symptoms to assist in the localization of the disease, and its diagnosis.

All anterior regions.—Pain, tenderness, swelling, œdema, and pointing in front and side of abdomen.

All posterior regions.—Pain, tenderness, swelling, œdema, and pointing in loin.

Upper tracts.—Pleuritic friction, pleural effusion, empyema, expectoration of pus; dyspnoea; supra-renal involvement; solar plexus involvement. (On right side.) Bilateral œdema of legs; jaundice; fatty stools; persistent vomiting; rapid emaciation; ascites.

Middle tracts.—Albuminuria and casts; supra-pubic, scrotal or vulvar pain or anæsthesia; suppression of urine; uræmia; pus in the urine; œdema of scrotum or varicocele (especially in left side).

Lower tracts.—Flexion of hip; pain or anæsthesia of front, inside, or outside of thigh; retraction of testicle; pain at knee; scrotal or vulvar pain or anæsthesia, without accompanying albuminuria; unilateral œdema of legs; abscess of sinus near Poupart's ligament (if left side); involvement of chyle receptacle (if right side.)

CHRONIC CYSTITIS.—Dr. Duncasse (*Gazette des Hopitaux*—N. O. Medical and Surgical Journal) regards corn silk as par excellence the remedy in chronic cystitis, allaying the inflammation and facilitating the expulsion of gravel. So marked also are its anæsthetic properties in such cases that the writer thinks it must possess some alkaloidal narcotic substance. This anæsthetic action is not marked in acute cystitis. He quotes with approval the conclusion of Landrieux regarding the stigmata maidis as

follows: 1. Not only are the different preparations of stigmata maidis useful as a modifier of the secretions of the urinary passages, but these same preparations can be equally considered as an incontestible diuretic agent. 2. Diuresis is rapidly produced, and in three or four days the augmentation of the amount of urine becomes evident and considerable. 3. The diuretic effects are observed, not only in the organs of urinary secretion, but also in disturbances of the circulatory system (diseases of the heart and blood vessels). 4. The pulse is regulated, the arterial tension is increased, while the venous tension is diminished. 5. The medicament does not cause the least disturbance, either of the nervous system or the digestive functions. 6. Tolerance for this drug is complete and absolute, and medication in chronic diseases can be continued without inconvenience for a month or six weeks, according to my observations.

THE BREAD-PILL CURE OF HYSTERIA.—M. M. Landouzy and Ballet, in the *Revue Mensuelle de Médecine*, give the history of an hysterical patient to which it is well to give an extended publicity, not because it presents any novel feature but as a proof of the scientific errors of those ill-trained minds which attribute the cure of hysteria to supernatural influences. An hysterical patient twenty-six years of age, who had previously suffered from chorea, was received in the wards of the Charité. There was very marked contraction of the lower limbs, and the patient was unable to execute the slightest movement, not being even able to raise herself in bed. After one or two hypodermic injections of morphia, at her express desire, she was told that she should have a more energetic remedy, and must use it cautiously. On October 7th, bread-pills were prescribed, and the next morning she related that, wishing to poison herself, she had swallowed the pills, and eagerly asked to have another pill; this was accorded, and resulted in her complete recovery. Two days later on she helped to clean the wards. In a month's time she left the hospital.—*Brit. Med. Jour.*

FEMORAL HERNIA.—**RUPTURE OF COVERINGS.**—Dr. Bernard Pitts records in the *Lancet*, April 7, 1883, the case of a woman aged 46, who had a right femoral hernia for twenty years. She had been once operated upon. One evening upon sneezing, the skin over the tumor, near to, but not in the line of the cicatrix, gave way, and a foot of intestine escaped. She was brought to the hospital three hours later on a cold frosty night. The exposed intestine was congested, dirty, bruised and cold. Taxis failing, the wound in the skin was enlarged, the crural ring was nicked, and by manipulation the bowel was returned. The thickened sac was dissected out and removed, drainage for peritoneal cavity provided, and the edge of the sac

brought together by very strong catgut, the edges of the wound by silk sutures, and carbolic gauze used as a dressing. The patient did well.—*Med. and Surg. Rep.*

PURPURA AND SUPPRESSION OF MENSES.—Dr. Lindsay stated at a recent meeting of the Ulster Medical Society, that several cases of purpura had come under his notice in women who were suffering from suppression of menstruation. He was not prepared to say that these cases were examples of vicarious menstruation; but in the absence of any well-established pathology of purpura, he thought he was warranted in concluding that the disease had its immediately exciting cause in altered innervation consequent upon the non-performance of the menstrual function. In the case under discussion, the administration of iron produced melæna, and had to be discontinued. The mineral acids were then given, and in two weeks the eruption had disappeared; and with the exception of slight languor and fatigue, the patient was again in her usual health.—*Lancet.*

NEW TREATMENT OF SARCOMA.—Prof. Winiwacker, of Liege, has been employing parenchymatous injections of hyperosmic acid in cases of sarcoma and lymphoma with astonishing success (*Revue Medicale*). A man applied at his clinic with a sarcoma of the neck as large as a child's head, deemed inoperable. For a fortnight he made daily an injection into its substance of three drops of a one per cent solution of the acid. The tumor rapidly softened, serous pus was discharged from the points where the injections had been made, the infiltration rapidly diminished, and at the end of a month the tumor had completely disappeared. There had been no sign of inflammation, and none of constitutional affection. Since this case he has resorted to it in others like it, as well as in cases of lymphoma and scrofulous adenoma. Only in genuine carcinoma has its result been disappointing.—*Weekly Med. Rev.*

ERGOT AS A PREVENTIVE OF THE POISONOUS EFFECTS OF SALICYLIC ACID.—Dr. Schilling recommends the administration of ergot in conjunction with salicylic acid or quinine, to obviate the unpleasant effects of those drugs. He had observed, in a number of cases in which large doses of salicylic acid were taken, a marked congestion of the external auditory canal and membrana tympani. He was thus led to give ergot to cause a contraction of the vessels, and obtained in every case a cessation or notable diminution of tinnitus and deafness. The dose of ergot (aqueous extract) should be about one-tenth that of the salicylic acid. The antipyretic effect of the latter is not weakened by the ergot. Like favorable results were obtained by combining ergot with quinine.—*Allgem. Med. Central-Zeitung.*—*Med. Rec.*

REMOVAL OF WARTS.—Warts may be removed by cauterization, as recommended by Dr. Cellier in the *Journal de Méd. et de Chir. Pratiques (Medical Record)*. An ordinary pin is thrust through the base of the wart, care being taken not to wound the healthy tissue beneath. Then the skin being protected, the head of the pin is heated in the flame of a candle. It is said that the wart becomes white and fissured in a few minutes, and comes away on the point of the pin. Dr. Cellier also says, that it is only necessary to remove one wart on the hand, that though there may be a dozen, all the others will disappear without treatment.

GLYCERINE IN SKIN DISEASES.—M. Desguin, of Antwerp, has given glycerine internally in certain forms of skin disease with, it is said, marked success, especially in acné punctata and the furuncular diathesis. He commences with four drachms daily and gradually increases the dose. He states that the secretion of the cutaneous glands, which is thick and irritating in these diseases, becomes more liquid, and cutaneous irritation is notably lessened. During convalescence from scarlet fever, he believes that it facilitates desquamation.—*Med. & Surg. Rep.*

CASTOR-OIL AND GLYCERINE.—A mixture which is of an agreeable flavor and in which the nauseous smell of the oil is efficiently disguised, can be made thus:

R.	Ol. ricini.....	3 j.
	Glycerini.....	3 j.
	Tr. aurantii.....	.M xx.
	Tr. senegæ.....	M v.
	Aquæ cinnam.....	ad. 3 ss.

This forms a beautiful emulsion, is easily taken, even by children, and if administered at bedtime will produce a gentle motion the following morning. *N. Y. Med. Rec.*

SORE NIPPLES.—Dr. Favre (*St. Petersburg Medicinische Wochenschrift*) is of opinion that there are two varieties of these, fissures and erosions, and believes that the latter are to a large extent due to tight fitting dresses and pressure by corsets. He advises that the nipples be sprinkled with bismuth, dry, or that this be made into an ointment in the proportion of one of bismuth to two of vaseline. This procedure has often resulted in a cure within twenty-four hours.—*Gaillard's Medical Journal.*

CHLORATE OF POTASSIUM IN ULCERATING EPI-THELIOMATA. In fine powder, this is said to yield excellent results when dusted over the surface of ulcers and ulcerating epitheliomata. The surface should be cleansed and the powder dusted thickly on twice a day. This, it is claimed, relieves pain and promotes healing.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batelière, Paris.

TORONTO, AUGUST, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

THERAPEUTICS OF BUTTERMILK.

Koumiss excepted, which is itself a kind of buttermilk, no beverage is so grateful and refreshing to thirsty patients as buttermilk. It is a fortunate circumstance too, that while the patient is assuaging his thirst with the most agreeable drink, he is unconsciously taking in the very best of food. Patients who loathe every other kind of food will greedily partake of buttermilk. It also possesses medicinal properties of considerable value. It is therefore not surprising that it is daily growing in favor with the profession. One thing, however, is surprising, and that is, the absence of any extended reference to it in medical literature.

From time immemorial buttermilk has been a staple article of diet. In Scotland and the North of Ireland it is delivered by dealers as regularly as new milk. As everybody knows, these people are the great porridge eaters of the world. By them, buttermilk is preferred with their cherished dish, and judged by results porridge and buttermilk are wholesome articles of diet, for where can be found sounder bodies or clearer heads, than are to be found amongst these celebrated porridge and buttermilk eaters. Buttermilk may be roughly described as milk which has lost most of its fat, and a small percentage of its casein and which has become sour by fermentation. To suppose that the principal elements of buttermilk are constant in quantity, and in their relation to each other, is a great mistake. To assist us in ascertaining more accurately the composition of buttermilk, we shall first of all examine the cream-crock. It contains

cream and milk in variable proportions. The milk has undergone fermentation and is acid, or sour, as it is commonly called. The relative proportions of cream and milk, contained in the cream-crock, depend on the fancy of the person who skims the milk-pans, in allowing much or little milk to pass over with the cream. There may therefore be much cream and little milk, or the reverse, a circumstance which has an important bearing on the contents of the churn, after the removal of the butter. Let it be borne in mind that under no condition is the whole of the fat removed. There is always a residuum of fat left in the churn. Should the cream be greatly in excess of the milk, this residuum of fat will be greater and *vice versa*. The casein contained in a given quantity of buttermilk, also varies in quantity. The thinner the layer of milk allowed to pass off with the cream, the poorer will be the resulting buttermilk in casein. The casein is still further reduced in the process of churning, a certain percentage being removed along with the butter. From this it is plain that buttermilk not only contains casein in variable quantity, but the casein is always slightly below the standard of average milk. Temperature is another disturbing factor in the proportionate relations of fat and casein contained in buttermilk, as compared with standard milk. If churning be performed at a temperature much too high the fat globules refuse to aggregate or coalesce so as to form butter. They behave in the same manner at a temperature much too low. As the real intermediate line is seldom exactly struck, it is easy to see that this furnishes an additional cause for a frequent excess of fat in buttermilk. If in connection with the foregoing facts we take the results of fermentation, or coagulation of milk, in which the sugar is converted into lactic acid, we shall have a tolerably clear idea of the ultimate constituents of buttermilk.

Coagulated skim milk differs but little from buttermilk in its chemical condition. It probably contains about the same quantity of fat. It is, of course, richer in casein, and herein lies the principal difference. In fact it is almost a perfect substitute for buttermilk, after being treated in the same manner as the contents of the cream-crock, that is, agitated, so as to break up, and thoroughly reduce the curds, and make the whole light and frothy by admixture with the atmosphere. Not long since a lady of our acquaintance hit upon the

above plan to satisfy the longings of an invalid for buttermilk, and it is to that circumstance that this article owes its origin. The season being winter buttermilk was unobtainable. The milk was coagulated by being put in a warm place. It was agitated by a revolving egg-beater until it was light and frothy. Sour milk thus treated tastes exactly like fresh buttermilk. In view of the fact that buttermilk is hard to get at certain seasons, the value of the proposed substitute becomes apparent.

The first process milk undergoes in the stomach is the coagulation of the casein. In sour milk this is already accomplished, and that too in a more satisfactory manner. Sweet cow's milk coagulates in the stomach in the form of semi-solid cakes, which many stomachs are unable to reduce to a proper state of subdivision. In sour milk on the contrary, the curds are loose and flakey, much resembling the curdling of human milk, which may be seen in the vomit of the over-fed infant at its mother's breast. The digestion of sour milk is made still more easy by the process of churning, by which the flakey curds are reduced to a state of fine subdivision.

Long experience has demonstrated the superior digestibility of buttermilk, and this inquiry simply furnishes the reasons. Buttermilk is a true milk peptonoid, that is the fashionable word of the day,—milk already partly digested. The range of its application is therefore wide and but little restriction need be observed in its use. It is good food and drink for young and old, sick and well. Being food it ought not, as many do, be taken between meals. This practice accounts largely for the common belief that buttermilk disagrees with many persons. Being an agreeable drink, it is often too freely used. Sick persons who partake of little or nothing else, may partake much oftener, and more freely. Although containing about the same quantity of nutrition as sweet milk, yet patients appear to be able to consume with ease at least double the quantity of buttermilk.

Buttermilk has at least three therapeutic properties more or less marked. It is a decided laxative to the bowels, and this fact should be borne in mind in the treatment of typhoid. This affords a hint for its use in habitual constipation. Buttermilk is a diuretic and may be prescribed with advantage in some kidney troubles. Owing to its

acidity, combined with its laxative properties, it is believed to exercise a gentle impression on the liver. It is well adapted to many of the cases where it is customary to recommend lime-water and milk. It is invaluable in the treatment of diabetes, either exclusively or alternating with skim milk. In some cases of gastric ulcer and cancer of the stomach it is the only food that can be retained.

QUEBEC MEDICAL ELECTION.

The triennial meeting of the College of Physicians and Surgeons, Que., was held in Quebec on the 11th ult., under the Presidency of Dr. R. P. Howard of Montreal; Drs. A. G. Belleau and F. W. Campbell, acting as secretaries. Among those present were Drs. R. P. Howard, L. Larue, A. G. Belleau, C. Verge, Z. Gravel, A. Larochelle, J. Th  berge, G. B. Lafleur, W. Lamontagne, F. W. Campbell, J. L. Leprohon, H. Sauv  , W. Osler, G. Ross, T. A. Rodger, J. A. Ross, E. P. Lachapelle, D. B. Desaulniers, T. Fortier, G. Lachance, R. Latraverse, C. E. Lemieux, sr., J. A. Sewell, G. O. Beaudry, J. Lanctot, N. H. Ladouceur, A. Robitaille, A. Marois, J. Langlois, V. P. Lavall  e, E. P. Chevreuil, M. Guay, G. H. Dufresne, W. Marsden, J. P. Lavoie, A. Gavreau, L. Catellier, G. Bolduc, E. Gervais, C. Gingras, A. Dion, N. Lacerte, J. E. Ladriere, J. B. Bolduc, E. A. De St. George, C. S. Parke, S. Gauthier, J. B. Gibson, J. A. S. Brunelle, D. A. Hart, F. E. Roy, J. Marmette, A. Morissette, M. A. Falardeau, S. Bolduc, E. Duquet, E. Belleau, E. Badeau, J. B. Lamarche, J. M. Turcot, G. Turcot, E. Turcot, R. F. Rinfret, A. Jackson, F. R. Rinfret, F. D. Gilbert, P. Wells, A. Watters, W. Verge, G. Mazurette, J. Marceau, P. A. Shea, M. J. Ahern, F. J. Austin, H. Russell, V. St. Germain, L. Beauchesne, M. Fiset, A. Hamel, E. Morin, A. Vall  e, C. Cot  , A. Poliquin, F. Gendron, N. Lavoie.

The minutes of the last triennial meeting were read and approved. The treasurer, Dr. Lachapelle, presented his report which was adopted. M. Lamirande, the public prosecutor, also presented his report from which it appears that 44 actions were entered against persons practising medicine without license. Thirty-five of these were decided in favor of the College, nine were unfavorable, and five are *sub judice*. An animated discussion followed

upon some much-needed amendments to the act regarding the manner of electing governors. It was finally decided to submit the various propositions to the new board of Governors for their consideration, to report at the next triennial meeting. The election of Governors by ballot was then proceeded with, resulting as follows :

City and District of Quebec—L. Larue, A. G. Belleau, W. Marsden, C. S. Parke, E. A. De St. George, and H. Russell;—Lieut. Governor Robitaille, C. Rinfret, C. Gingras, M. Guay, P. E. Grandbois, J. Marmette, and L. T. Rousseau. *City and District of Montreal*,—T. A. Rodger and J. B. Leprohon;—J. Prevost, P. E. Migneault, D. A. Hart, N. H. Ladouceur, J. A. Duchesneau, J. Lanctot, L. D. Lafontaine, H. A. Migneault, and D. Marcil. *District of St. François*,—T. Larue, F. X. Paré and A. J. Austin. *District of Three Rivers*,—D. B. Desaulniers, Hon. J. J. Ross, and F. A. Dame.

University Representatives,—Laval, C. E. Lemieux, and J. A. Sewell, (Quebec), E. P. Lachapelle and A. Lamarche (Montreal); McGill, R. P. Howard, and Geo. Ross; Victoria, E. H. Trudel, and W. H. Hingston; Bishop's, F. W. Campbell and R. A. Kennedy.

At a subsequent meeting of the new board of governors the following officers were elected:—C. E. Lemieux, President; Hon. J. J. Ross, and W. H. Hingston, Vice-Presidents; A. G. Belleau, and F. W. Campbell, Secretaries; L. Larue, Registrar, E. P. Lachapelle, Treasurer; Profs. Miller, Howe, Verreault and Laflamme, Matriculation Examiners; Drs. Church and P. E. Mignault, Assessors for McGill College; A. C. McDonell and Ladouceur for Victoria, Marsden and F. E. Roy for Laval (Quebec), J. Reddy and O. Raymond for Laval (Montreal), and T. A. Rodger and J. B. Leprohon for Bishops. Examiners for Midwives, Drs. Marsden, Sewell, and Gingras for Quebec; and E. P. Lachapelle, E. H. Trudel and R. A. Kennedy for Montreal.

RESORCINE IN THE TREATMENT OF WHOOPING COUGH.

Dr. Moncorvo, Professor of the Diseases of Children in the Polyclinique of Rio de Janeiro, in an article published in the March, April and May

issues of *Uniao Medica*, advocates the topical employment of Resorcine in the strength of one per cent., applied by a fine pencil brush to the larynx. He gives fourteen instructive cases, of various degrees of severity and duration, in which this remedy was found by him highly serviceable. He gives the following as his general conclusions :

1st. That whooping cough, whose nature, up to a very recent period, has been subjected to the most diverse interpretations, in relation to its genesis, may, to-day, according to the latest microscopic researches, be included in the class of parasitic diseases.

2nd. That the disease appears attributable to the presence of micrococci which multiply prodigiously in the hyperglottic vicinity of the larynx, infiltrating its epithelial cells, which appear to be the predilective seat of their development.

3rd. That resorcine, applied to the laryngeal mucous membrane, caused in all the cases in which it was employed, rapid decrease of the number of the paroxysms, moderation of their intensity, and finally recovery in a short period of time, without the aid of any other medication.

Dr. Moncorvo says that resorcine, owing to its much less caustic action, and the absence of disagreeable taste and odour, is far preferable to carbolic acid. He has administered it internally to children, even the newly born, suffering under diarrhoea and dysentery. He advises that strict attention be given to the quality, so as to secure the article in purity, and he recommends that prepared by Monnet, of Geneva, which is of notable whiteness, and in the form of silvery bright crystalline needles. It is extremely soluble in water. Dr. M. recommends the topical application with the fine pencil brush, to be repeated every two hours. The first applications, he says, sometimes exacerbate the coughing fits, but this irritation ceases in two or three days. In twenty cases treated by him, he was not disappointed in his expectation in a single instance, and some of them had been very obstinate, or even dangerously complicated, as with hereditary syphilis, threatened hydrocephalus, pulmonary tuberculosis, intermittent fever, etc.

Resorcine, in its source being a congener of carbolic acid, no doubt acts in a similar manner as a parasiticide. Dr. Moncorvo states that he has, by numerous microscopic examinations of the

sputa expectorated by his patients laboring under whooping cough, verified the statements made by Letzerich, Henke, Steiner, Hagenbach and other writers, as to the parasitic character, or complication of the disease. The treatment advocated by him is therefore free from all insinuation of empiricism, and as we understand the article to be inexpensive, it will no doubt soon be largely sought after.

THE editor of the *Sanitary Journal* has been examining the evidence for and against vaccination. He desires not to be regarded as opposed to vaccination, but he is somewhat sceptical and states that "after carefully examining and sifting all the obtainable evidence, *pro* and *con*, in regard to the measure, he fears that it has been and is too much extolled, and too much relied upon, to the comparative neglect of other, and more strictly scientific preventive measures." He refers to the unsatisfactory results of the practice in Switzerland, and points out that the two principal legislative measures relating to compulsory vaccination in Great Britain were enacted and came into force "on the decline of two great epidemic periods, such periods being invariably followed by a decline in the mortality;" and, that, notwithstanding the reduced mortality since enforced vaccination, as compared with that previous to it, "there has been a great increase in the proportion of deaths in London (E.) since the commencement of compulsory vaccination." He thinks that the great difference between the mortality from small-pox amongst vaccinated and that amongst unvaccinated persons may be largely accounted for by the character of most of the unvaccinated, who are he believes of the poorest classes, "the improvident, the unsettled—who would be most exposed to, and from their habits, prone to take the disease, and the very ones amongst whom by far the greatest mortality would most certainly take place in hospital, or anywhere." These are a few of the most important points. The writer gives instances where outbreaks of small-pox have been repeatedly stamped out without vaccination, by isolation, quarantine, &c. It has been stated that possibly the profession may have been looking too much to the statistics of one side of the question of the value of vaccination. No doubt vaccination affords some protection, and the difficulty is in getting other preventive measures thoroughly carried out.

FORDYCE BARKER'S TRIBUTE TO YOUNG MEN.—My own experience has been that from this class I learn the most; it is from them that I get the most useful knowledge and the most valuable suggestions. I hold it to be one of the great missions of this Academy to bring out and develop, by its library and its scientific work, the young men who are to take care of its interests and give the stamp of character to the Academy and the medical profession of this city in the future. I do not hesitate to express the belief, based on a rather extensive acquaintance with the profession in other cities and other countries, that the number of young men of bright intellects, of noble zeal, who have had the largest opportunities at home and abroad for a thorough and complete education, which have been most conscientiously improved, is greater than has ever before been aggregated in any city in any age of the world, and that twenty years hence New York will have a galaxy of distinguished men who will give the medical profession such prominence with the public and with the profession elsewhere as has never before been attained.—*N. Y. Medical Journal*.

[These noble sentiments, by a noble man, are in striking contrast with those members of the profession who occasionally object to a Medical Journal on the ground that it contains articles written by young men, whom these worthies seem to consider as desiring to air their newly acquired knowledge.—ED.]

PLANS OF A MODERN COTTAGE.—Messrs. Paliser & Co. of Bridgeport, have lately issued a sheet containing plans and specifications for building a handsome six or eight room cottage with or without tower. The cost will vary from \$1,700 to \$3,000, according to size and style of finish. The publishers have found it the most popular plan they have ever issued, and state that it has been adopted in over five hundred houses. We have seen the plans and specifications referred to, and would recommend a perusal of them by those who contemplate building. This firm issues specifications in blank form for all kinds of buildings; also, forms of building contracts, and books on modern architecture.

HYPOSULPHITE OF SODA AS A DISINFECTANT.—The difficulty of finding a satisfactory disinfectant with which to destroy fœtor in cases of cancerous ulcers, is well known. Dr. W. E. Buck, in the *Brit. Med. Journal*, says he has tried a saturated solution of hyposulphite of soda added to an equal quantity of water, and found it exceedingly efficacious. The

ulcerating surface was well syringed and washed with the solution, and was then covered with rags steeped in the solution. The granulations were kept clean, and the fœtor was well kept under. It is cleanly, has no smell, does not stain, and is very cheap.

F. R. C. P., LOND.—Dr. Wm. Osler, of McGill College, Montreal, has been elected a Fellow of the Royal College of Physicians, London. We congratulate our young and talented confrère upon this justly merited mark of distinction. There is only one other Fellow of the College resident in Canada, viz.: Dr. J. A. Grant, Sr., of Ottawa. We are pleased to note this recognition of industry and talent among our Canadian confrères by old-world institutions.

BACILLUS TUBERCULOSIS IN AN ABSCESS.—Dr. R. C. Smith (*Brit. Med. Journal*), gives the details of a case of phthisis in a clerk aged 21 years. An abscess formed in the ischio-rectal fossa which was opened. A microscopic examination of this fluid by a half-inch object-glass, after the usual process of staining, revealed the presence of great quantities of well-marked typical tubercle-bacillus.

OL. SANTALI FLAV. IN GONORRHOEA.—Most successful results have been obtained in the treatment of gonorrhœa by *olium santali flav.* The dose is 15 to 20 drops in gelatine capsules, mucilage, or dropped on sugar, three times a day. It usually arrests the discharge in two or three days, but should be continued for about two weeks to prevent a relapse.

ST. JOHN MEDICAL SOCIETY.—At the annual meeting of the St. John Medical Society, the following officers were elected for the ensuing year:—Dr. P. R. Inches, President; Dr. James Christie, and Dr. G. L. Taylor, (of Hampton,) Vice-Presidents; Dr. Wm. Christie, Treasurer; and Dr. Geo. A. Hetherington, Secretary.

THE thirty-seventh annual meeting of the Association of Medical Superintendents of American Institutions for the Insane, opened at Newport, R. I., on the 26th July. Delegates were present from thirty States, and from the provinces of Quebec and New Brunswick. Dr. John P. Gray, of Utica, N. Y., was elected President for the ensuing year.

PERSONAL.—Dr. W. J. Robinson, of Fergus, has recently married the daughter of the late Dr. Orton, and commenced practice in Ancaster, Ont. Dr. W. H. Aikins, son of Governor Aikins, has returned from Vienna, and is now in Winnipeg, Man.

APPOINTMENTS.—Dr. W. F. McLean has been appointed Demonstrator of Anatomy in the London Medical College, and Dr. J. M. Jackson Assistant Demonstrator.

John Thomas Duncan, M.D., of this city, has been appointed Associate Coroner in and for the city of Toronto. Dr. Riddel's resignation has been accepted.

ERRATUM.—On page 344 of the July issue, for Dr. Drink read Dr. Druitt.

Books and Pamphlets.

A TREATISE ON FRACTURES, by Lewis A. Stimson, B.A., M.D., Professor of Surgical Pathology in the Medical Faculty of the University of the City of New York. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

There are three things which especially recommend this little work to our favourable consideration; its extremely practical character, its avoidance of unnecessary detail, and the unpretentiousness and absence of anything approaching egotism which the author displays. It does not purport to be so much the result of his own observations as a collection of those of others. To the student who needs a somewhat fuller account of fractures and their treatment than is to be found in the usual surgical text-books, it will be invaluable, as, except on the subject of compound fractures, on which the author has very little to say, it is full without being burdened with the cumbersome minutiae in which so many book-makers delight. The author has, wisely we think, followed no cast iron rules, and has left much to the good sense and discrimination of his readers. The first third of the book is devoted to the varieties, etiology, pathology, complications and treatment of fractures in general, which are then individually discussed at length. The chapter on fractures of the thigh is particularly exhaustive, and considerable space is given to Colles fracture. The varieties of splints and other me-

chanical appliances of a like nature, including some of the later inventions, are described and illustrated by wood-cuts, but the author has carefully avoided cumbering his pages with accounts of improved and unpractical methods and apparatuses. The author is a moderate believer in the plaster-of-Paris dressing, and devotes some space to the explanation of the preparation and application of its various forms. On the subject of anti-septic dressings he has very little to say, and limits himself to detailing the rules for their employment. The book is profusely illustrated, and contains a quantity of valuable statistics, which, like the illustrations, are in the main taken from Gurlt's work. Its principal shortcoming is the smallness of the space devoted to differential diagnosis

THE INTERNATIONAL ENCYCLOPEDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by John Ashhurst, Jr., M.D., Prof. Clinical Surgery, University of Pennsylvania. Vol. III., 1883. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This elaborate work, which will be completed in six volumes, has reached three volumes, the first and second of which have been favorably noticed in our pages. Our admiration for the work increases as it progresses. It is one of which its authors may well be proud. The present volume contains about 700 pages, and is presented in a most attractive form by the publishers. We are informed that this great international work is being translated and published in France and Italy. The volume before us treats in a masterly way, injuries and diseases of the various tissues, muscles, tendons, fasciæ, lymphatics, bloodvessels, vascular system, aneurisms, nerves and joints. Several chromo-lithographs embellish this volume. The complete work will form a valuable contribution to modern surgery. The editor, in conclusion, laments the death of one of his most distinguished collaborators, the late Prof. W. H. VanBuren, of New York.

INSANITY; ITS CAUSES AND PREVENTION. By H. P. Stearns, M.D., Superintendent of the Retreat for the Insane, Hartford, Conn. New York: G. P. Putnam & Sons.

This is a most valuable book. The author tells us in his preface, "it has not been written for spe-

cialists exclusively, though it is hoped it will not prove wholly uninteresting to them, but rather for those in the general practice of medicine, educators, and the more intelligent lay members of society."

It is beyond all question that to the last two classes its careful perusal would be unspeakably valuable, but especially the three chapters treating of education in its three important forms, of scholastic, industrial, and moral. The whole of these is so good and forcible that to attempt quotations would be nothing short of mutilation, and as the book is not a large one—only 248 pages of short octavo—and on excellent paper with very plain type, we would hope that it will find a place on every drawing room table. Parents, teachers and all persons interested in the future well-being of youth could not fail to derive instruction from its wise admonitions; nor could it be less profitable to the young, who would find in it much good advice on the important subjects of marriage, alcohol, tobacco, insufficient sleep, overwork of brain, religion, poverty, rest and recreation, etc., all written in very plain, clear language. In truth the book would be a household treasure.

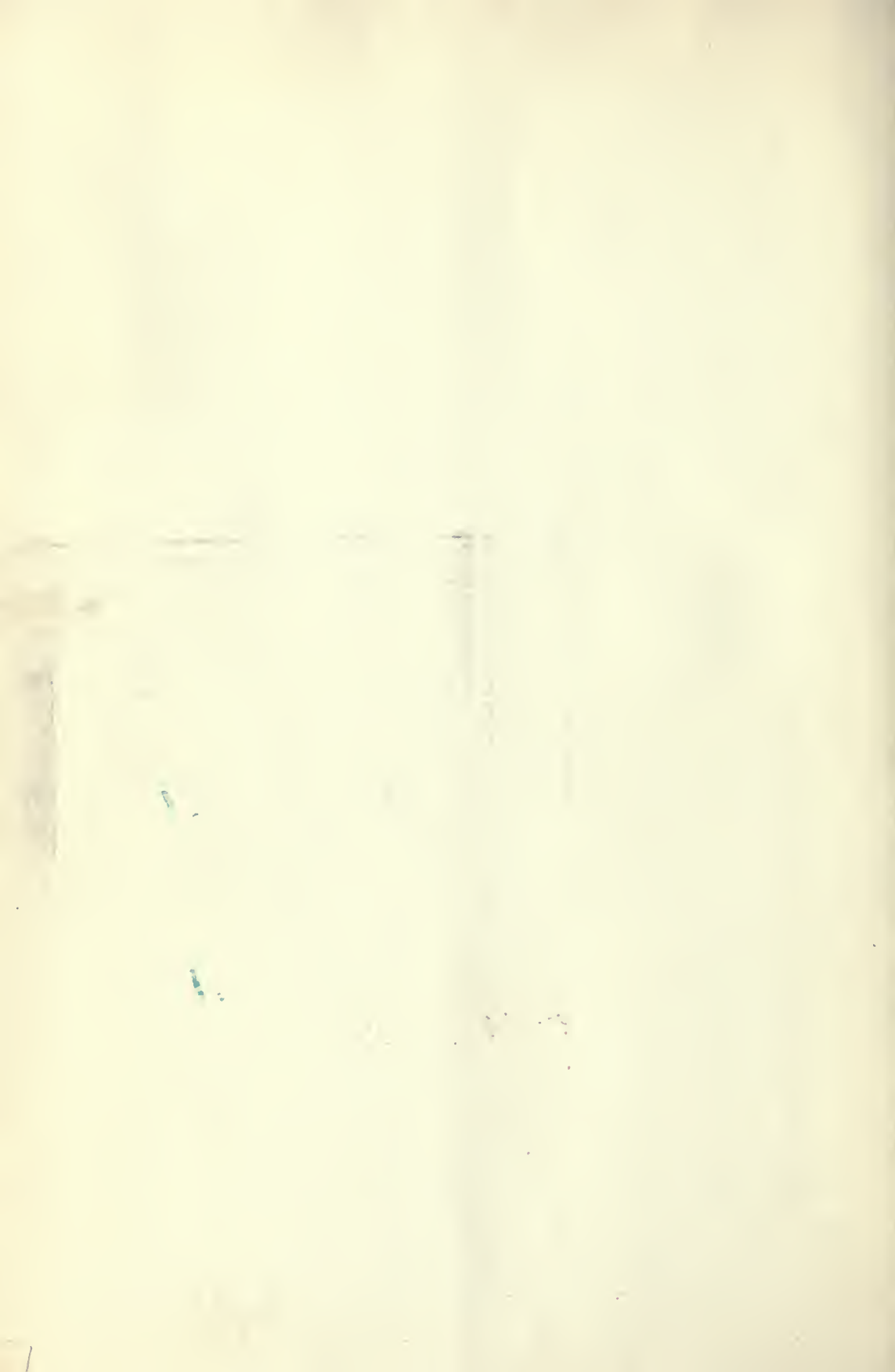
ON THE DISPOSAL OF SEWAGE. Issued by the Provincial Board of Health. Toronto: Printed by C. Blackett Robinson.

This is No. 11 of the series of *brochures* issued by the Provincial Board of Health, and is, it may safely be said, the only document of any practical value published by that body since its inauguration. It is merely what its name implies, a brief *resumé* of the various methods of disposing of sewage, chiefly adapted from such works as those of Parkes, Wilson, Bayles, Waring and Latham, and is illustrated by several wood-cuts. The style is as simple as possible and entirely free from technological terms, so as to be comprehensible even to the most uninitiated. The pamphlet is a decided improvement upon its predecessors, and the appearance of a few more such would go far towards establishing the Board's reputation for doing something of value in the interest of public sanitation.

DIAGNOSIS OF OVARIAN CYSTS BY MEANS OF THE EXAMINATION OF THEIR CONTENTS. By H. J. Garrigues, A.M., M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

This is a reprint in book form of the excellent papers on the above subject which appeared some time ago in the *Obstetrical Journal*.





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